

# Dire Straits

The American-Canadian Dispute over the Northwest Passage and a Policy  
Recommendation to Improve Arctic Security

Zachary S. Elder

Undergraduate Honors Thesis  
Sanford School of Public Policy  
Duke University  
December 2014

## Abstract

Global climate change is thawing the Arctic, opening once impassable northern waterways and presenting new challenges for Canada and the United States as maritime traffic in the region increases. A longstanding legal dispute over the Northwest Passage, the once-frozen strait running through Canada's Arctic Archipelago, continues to hinder bilateral efforts to curtail rising threats to the environment, human health, and national security. This analysis examines the existing literature on the North American Arctic and incorporates information gathered from various American and Canadian government officials, military personnel, and academics in order to craft a solution to this legal dispute. I argue that Canada and the United States can overcome this dispute by negotiating a bilateral transit agreement, and that this bilateral agreement will catalyze efforts by both nations to implement the infrastructure improvements necessary to safeguard the Arctic.

## **Table of Contents**

Introduction.....	5
I. Climate change and the rise of international shipping in the Northwest Passage.....	7
II. Emerging Arctic security threats.....	12
III. International law regime and Canadian sovereignty claims.....	16
IV. Right-of-passage regimes relevant to the Northwest Passage.....	18
V. The U.S. dilemma—fear of setting a precedent.....	19
VI. Current bilateral cooperation.....	20
VII. Canada’s broken pledge to Arctic security.....	23
VIII. U.S. Arctic capabilities also lacking.....	24
IX. The importance of a bilateral transit agreement.....	25
X. A new bilateral transit agreement .....	27
XI. Feasibility of policy proposal – key actors.....	29
XII. Feasibility – other stakeholders and driving factors.....	32
Conclusion.....	36

### *Acknowledgments*

Without the constant support and guidance of my advisors, Stephen Kelly and Judith Kelley, this project would not have been possible. You deserve special thanks for your unceasing determination to help me in any way possible. Special thanks also to Captain C.J. Cassidy, Captain Kory Benz, Bud Locklear, and the rest of U.S. Embassy Ottawa for your encouragement and countless insights; John Higginbotham and Dr. David Vanderzwaag for your invaluable advice; Dr. Peter Harrison for your help in formulating key points of this paper; Dr. Lawson Brigham for your constant support; Ambassador Stu Symington and Dr. James Kraska for your initial encouragement; and my family and friends for all the support over the past year. I would also like to acknowledge the Sanford School of Public Policy for funding my research and making this piece possible.

## Introduction

The Northwest Passage is a waterway running through Canada's Arctic Archipelago that connects the Atlantic Ocean and the Arctic Ocean. Global climate change is rapidly melting sea ice in the Arctic Ocean and increasing the accessibility of northern waterways like the Northwest Passage, shown in Figure 1. As the North American Arctic continues to thaw, the region will experience increases in maritime traffic as waterways become more accessible for longer periods of the year. The Northwest Passage is especially attractive, because in many instances it provides a shorter route between the Atlantic and Pacific Oceans than the Panama Canal. This economic opportunity will draw the focus of international shipping interests to the North American Arctic, increasing the volume of voyages in the region. The Arctic also holds vast stores of natural resources that are becoming economically feasible to extract. The combination of an increasingly ice-free and traversable Northwest Passage, a local supply of resource wealth, and a growing population in the North American Arctic will introduce new threats to the environment, human safety, and national security in the region.



**Figure 1 - The Northwest Passage is a set of sea routes that runs along the northern coast of North America amidst the Canadian Arctic Archipelago. Displayed above are the possible routes and the U.S. and Canadian Exclusive Economic Zones (EEZs) (ArcticEcon.com, <http://arcticecon.wordpress.com/2012/01/13/the-northwest-passage-dispute-canada-map-with-exclusive-economic-zones/>).**

The United States and Canada are ill equipped to face these emerging Arctic threats. Neither nation has the necessary infrastructure or Arctic presence to handle the consequences of an increase in Arctic maritime traffic. Whether it is a large cruise ship running aground, a drilling rig blowing a gasket, an oil tanker springing a leak, or an unwanted foreign presence entering the

North American Arctic, the U.S. and Canada are unprepared. Although both the American and Canadian governments have repeatedly stated that the Arctic is an area of strategic importance, neither nation has devoted the resources necessary to prepare the region for what is to come. Canada and the United States also consider the North American Arctic to be an area of shared interests, making the lack of infrastructure and presence in the Arctic a bilateral issue as opposed to two separate unilateral shortcomings.

In order to fully understand the nature of the American-Canadian relationship in the Arctic, one must understand a modicum of international maritime law and how it applies to the Northwest Passage. The 1982 United Nations Convention on the Law of the Sea (LOS convention) is the prevailing international legal regime for maritime law. In other words, the LOS convention is the mechanism by which legal disagreements for maritime areas around the globe can be solved. Although the U.S. is not a signatory to the LOS convention, it still recognizes its contents as customary international law. But the convention's articles are ambiguous, and both Canada and the United States use the same articles to interpret the legal status of the Northwest Passage in different ways. The United States views the Northwest Passage as an international strait, like the Straits of Hormuz or Malacca, whereas Canada views it as an internal waterway, like the Mississippi River. The legal definition of the Northwest Passage has implications for how foreign vessels can use the waterway and what rules and regulations the coastal state, Canada, can enact in the region. Most Canadians view the U.S. interpretation of the LOS convention as a direct threat to their nation's sovereignty in the Arctic. The United States, on the other hand, worries that any acknowledgment of Canadian sovereignty over the Northwest Passage would set a dangerous precedent, allowing other foreign nations to make similar claims over disputed maritime areas around the globe and infringing upon the general principle of global freedom of the seas.

Canada and the United States temporarily solved this dispute over the legal status of the Northwest Passage in 1988 with the Arctic Cooperation Agreement. Ronald Reagan and Canadian Prime Minister Brian Mulroney signed the agreement, which ensured that the legal dispute over the Northwest Passage would not jeopardize either country's efforts to maintain an active naval presence in the Arctic. The pact essentially formalized an agree-to-disagree mentality between the two nations that did not address the sovereignty question in the Northwest Passage. But the changing geography of the region, due to melting sea ice, has made the Arctic Cooperation Agreement outdated and the legal dispute over the Northwest Passage much more pertinent today than it was when Reagan and Mulroney addressed the issue in the 1980s.

This analysis explores the possibility that the legal disagreement is in fact hindering the bilateral cooperation necessary to prepare the North American Arctic to handle emerging threats. The legal dispute over the Northwest Passage may not be the only reason the United States and Canada have taken few tangible steps to safeguard the Arctic—domestic political constraints and financial shortcomings also come to mind. But a more comprehensive policy agreement that addresses the legal dispute in the Northwest Passage might create a better atmosphere in which to conduct bilateral preparations for a thawing North American Arctic.

To address this possibility, I relied on three main data sources. First, I performed a thorough literature review to understand the legal and historical elements of the issue. Second, I conducted a series of personal interviews with American and Canadian Arctic scholars, American diplomats, representatives from the U.S. Navy and Coast Guard, the Canadian Coast Guard, and former Canadian government officials. Finally, I spent ten weeks during the summer of 2014 at the United States Embassy in Ottawa, where I gained an insiders perspective on how

the U.S. State Department views Arctic issues. I used these sources to come to my conclusions and address the central question of how to solve the legal dispute in the North American Arctic.

After addressing the status quo of the current situation in the Arctic, this paper offers a specific policy recommendation for the United States and Canada. The recommendation is not tailored specifically for one nation, but rather focuses on how to make such an agreement possible between both nations. The final recommendation, a bilateral transit agreement, would be similar in design to the Arctic Cooperation Agreement signed by Reagan and Mulroney. The bilateral agreement would guarantee transit rights in the Northwest Passage to all American vessels and establish polar shipping requirements for vessels traversing the North American Arctic. It would satisfy Canadian worries about Arctic sovereignty, American concerns about precedent setting, and both nations' need for immediate action in the Far North. After addressing the specifics of the transit agreement, I conduct a stakeholder analysis to address the political feasibility of such an agreement. I come to the conclusion that a bilateral transit agreement is the best solution to the U.S. and Canada's legal dispute in the Northwest Passage, and such an agreement needs to be negotiated in the near future in order to mitigate emerging Arctic threats.

## **I. Climate change and the rise of international shipping in the Northwest Passage**

A legal agreement between the United States and Canada is urgently needed since the Northwest Passage is on the verge of experiencing a drastic increase in vessel traffic due to melting sea ice.<sup>1</sup> Various public and private scientific bodies agree that global warming is indeed causing Arctic sea ice to melt, although there remains some disagreement over the pace of melting and its effects on the Northwest Passage.<sup>2</sup> In 2011, estimates for an ice-free Northwest Passage ranged from 2013-2060, but most of those models projected that the Passage would be ice-free for at least part of the summer by the 2030s.<sup>3</sup> A recent report by University of Oxford professor Peter Wadhams, utilizing data on ice volume gathered by submarines over the past four decades, even suggested that the Arctic might be ice-free by 2020.<sup>4</sup> Although sea ice levels have rebounded slightly since record lows in September of 2012, there is a steady downward trend in the overall area of the Arctic covered in ice.<sup>5</sup> The National Snow and Ice Data Center (NSIDC), a U.S.-based research center that conducts polar and cryospheric research, recently issued a report confirming this trend.<sup>6</sup> The report estimated an average sea ice extent of 5.28 million square kilometers for the month of September, as shown in Figure 2. Seasonal lows generally occur during the month of September, and the ten lowest ice extents on satellite record have all occurred in the past ten years.<sup>7</sup> The report also notes that weather patterns in the Arctic during 2013 and 2014 were relatively normal, indicating that recent declines in sea ice are part of an established trend as opposed to an anomaly.

As sea ice has continued to melt in the Arctic, the Northwest Passage has seen an increasing volume of vessel traffic. A pair of datasets, released in 2007 and 2013, respectively, helps illustrate this trend. Canadian legal scholar Donat Pharand compiled a dataset of all foreign transits through the Arctic Archipelago from 1903 to 2005 and found a steady increase in vessel traffic since 2000.<sup>8</sup> The second data set, analyzed by researchers from the University of Ottawa's Laboratory for Cryospheric Research, used statistics obtained from the Canadian Coast Guard (CCG) to examine increases in shipping in Canada's northern waters. Their report totaled 977 individual transits in the Vessel Traffic Reporting Arctic Canada Traffic Zone (NORDREG

zone) from 1990-2012.<sup>9</sup> Although this total includes all transits in Canada's NORDREG zone, not just in the Northwest Passage, the CCG's data indicates that the volume of traffic in the Canadian Arctic is increasing.<sup>10</sup> Figure 3 shows the increase in shipping traffic over this 12-year period between the months of May and November, the traditional shipping season in the Arctic. Following the record low for Arctic sea ice in 2006, shipping in the NORDREG zone began a steady climb in the summer and fall months of 2007 and continued to rise through 2012. Since 2012 this vessel traffic has continued to rise, mostly in the form of destination shipping needed to supply a growing Canadian population in the country's northern territories.

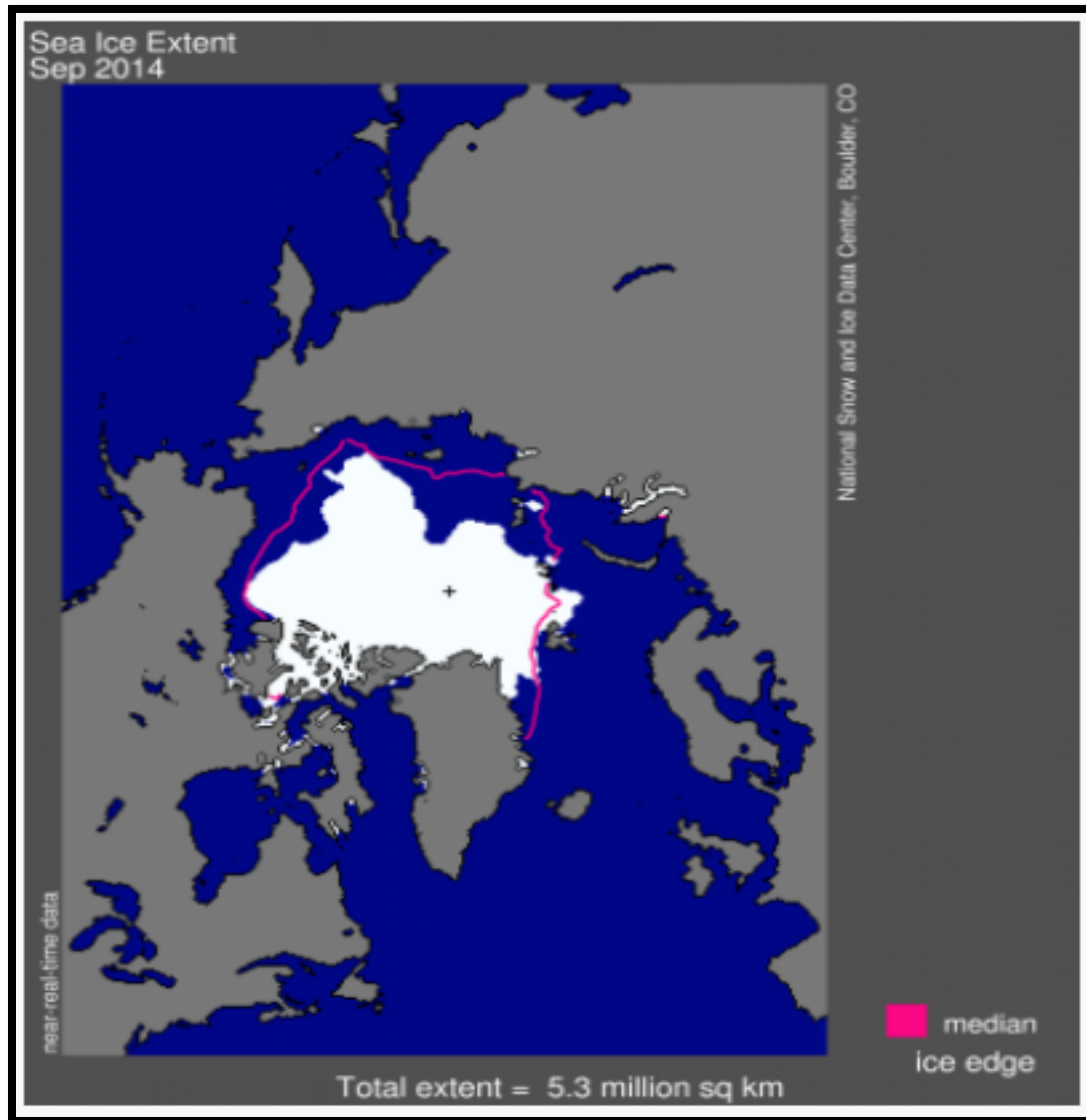


Figure 2 - Arctic sea ice extent for September 2014 was 5.28 million square kilometers (2.04 million square miles). The magenta line shows the 1981 to 2010 median extent for that month. The black cross indicates the geographic North Pole (National Snow and Ice Data Center, October 7, 2014).



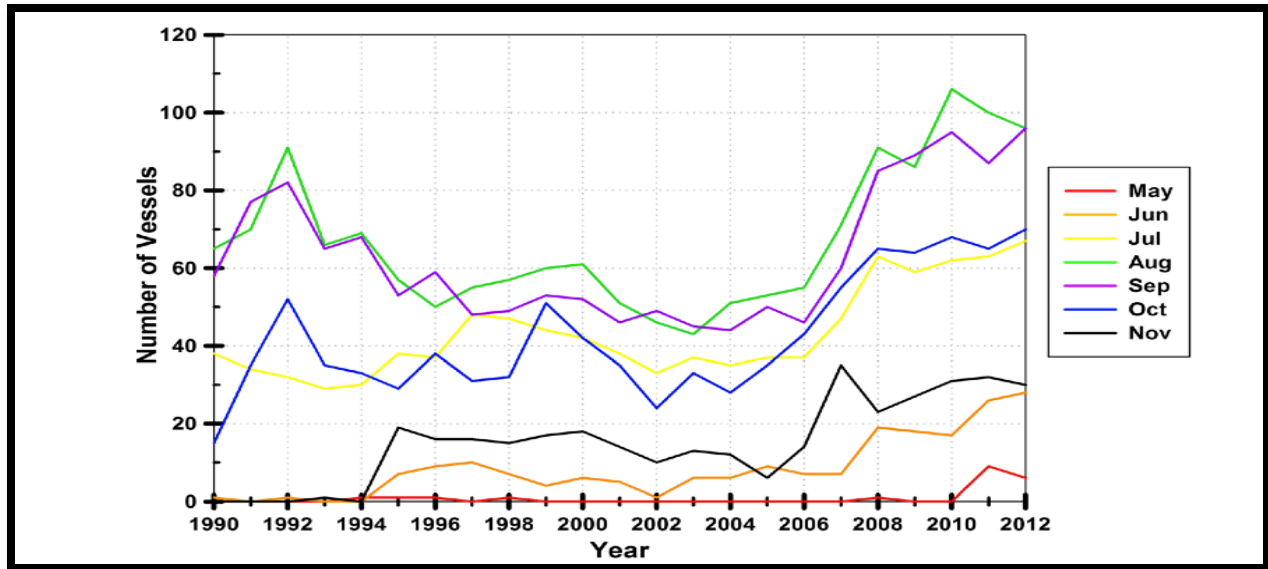


Figure 3 - Total monthly vessel counts from May through November in the NORDREG zone, 1990-2012 (Pizzolato, Howell, et. al, December 19, 2013).

The traffic increase in the Canadian Arctic includes more than just destination shipping, though. International shipping interests, with the encouragement of the Canadian government, are starting to assess the Northwest Passage as a potential alternative to the Panama Canal.<sup>11</sup> The Northwest Passage provides a shortcut—ranging from several hundred to more than 1,000 nautical miles, depending on the route taken—between East Asia and the Atlantic. In September of 2013, the Danish ship *Nordic Orion* became the first vessel to test the economic promise of this shortcut. The bulk carrier sailed from Vancouver through the Northwest Passage on its way to Finland, carrying coking coal from Canadian mining company Teck Resources. The transit was the first of its kind by a bulk carrier and shaved 1,000 nautical miles and \$80,000 in fuel costs off the trip. With less fuel on board, the *Orion* could take a heavier load of coal, making the shortcut even more profitable.<sup>12</sup>

Another bulk carrier made a complete transit of the Northwest Passage in 2014, this time travelling without the assistance of a Canadian icebreaker, as the *Orion* did the year before. On September 19<sup>th</sup>, the *MV Nunavik* took on 23,000 tons of nickel concentrate from the Chinese-owned Nunavik Nickel Mine located near the Hudson Strait in eastern Canada.<sup>13</sup> The *Nunavik* transported the nickel through the Northwest Passage and rounded Point Barrow in Alaska by the end of the month on its way to Bayuquan, China. International shipping firm Fednav, owner of the *Nunavik*, reported that the voyage was about 40 percent shorter than using the Panama Canal, the next best alternative. Like the *Orion*, the *Nunavik* saved money by carrying a larger cargo instead of the additional fuel required to take the longer route through the Panama Canal. The vessel docked at its Chinese port on October 17<sup>th</sup>, setting a precedent as the first major commercial vessel to transit the Northwest Passage unassisted.<sup>14</sup> Voyages like this are becoming more realistic as the summer and fall Arctic-shipping season grows longer due to sea-ice melt. Nordic Bulk Carriers, owner of the *Orion*, has already announced plans to use the Northwest Passage again in 2015.<sup>15</sup> Other shipping companies may soon follow suit, looking to capitalize on the same shortcut used by the *Orion* and the *Nunavik*.

Private entities will also be drawn to the North American Arctic because of its vast reserves of natural resources, resulting in more voyages like those of the *Orion* and the *Nunavik*. The Arctic region as a whole contains an immense quantity of energy reserves—between 100 and 200 billion barrels of oil and approximately 2,000 trillion cubic feet of natural gas.<sup>16</sup> The estimates of commercially recoverable oil and gas in the Beaufort Sea, located in the American-Canadian maritime area north of Alaska and the Yukon Territory, range from 4 to 12 billion barrels and 13 to 63 trillion cubic feet, respectively.<sup>17</sup> The North American Arctic also houses large deposits of valuable minerals, like nickel, copper, zinc, uranium, and even diamonds. Vessels might carry zinc from the Red Dog Mine in Northwest Alaska through the same route as that used by the *Orion* in 2013. The Canadian mining company Baffinland is set to make its first shipment of iron ore from the Mary River Project on Baffin Island through the Northwest Passage during the summer months of 2015.<sup>18</sup> The Baffin Island project will likely send raw material shipments through the Northwest Passage for years to come, and other companies may soon follow the lead of Baffinland by staking claims to other mineral deposits in the North American Arctic. The resource development on Alaska's northern coast, in the Beaufort Sea, and in Canada's Arctic Archipelago promises an increase in raw material shipments through the Northwest Passage.

The Canadian Arctic is also experiencing an increase in vessel traffic from adventurers and cruise ships chartered by wealthy tourists with a penchant for the extreme. In 2003 only seven cruise ships sailed in Canadian Arctic waters, but that total more than doubled by 2008.<sup>19</sup> These numbers have continued to rise, especially in the wake of record sea ice lows in 2007 and 2012. U.S.-based Crystal Cruises, headquartered in Los Angeles but owned by a Japanese shipping company, recently announced plans to embark on a luxury expedition from Alaska to New York via the Northwest Passage.<sup>20</sup> The *Crystal Serenity*, a 68,000-ton vessel, will ferry as many as 1,070 guests on a 32-day journey across Canada's Arctic Archipelago for a tourism experience unlike any other. The first of these voyages is set to take place in August of 2016, marking a new era in tourism of the Canadian Arctic and the Northwest Passage, specifically.

Although some scholars—most notably Canadian Arctic expert Franklyn Griffiths—argue that the Northwest Passage will not become a heavily trafficked international waterway, a case study of the *Orion* voyage in 2013 seems to prove otherwise.<sup>21</sup> The private sector may be willing to take chances in the Northwest Passage if there is profit to be had, regardless of the risks. Nordic Bulk Carriers was willing to risk a voyage through ice-laden waters to squeeze out an extra \$200,000 in profit. Multinational insurer RSA Group risked a massive loss by underwriting the *Orion*'s maiden voyage in the Northwest Passage, but in the process netted a handsome profit by charging a high premium.<sup>22</sup> The International Chamber of Shipping (ICS), which represents over 80 percent of the world merchant fleet, including the national shipping organizations of every Arctic nation except Russia, released a position paper in 2012 stressing the importance of establishing governance structures and regulatory regimes for Arctic maritime traffic in the face of melting Arctic sea ice.<sup>23</sup> The position paper, a strong statement from the international commercial shipping community, references the Northwest Passage as a potentially viable shipping route in the future and urges action on the part of international governments to prepare for what the ICS sees as an inevitable increase in Arctic operations. Even without the effects of global climate change, the ICS asserts that advances in shipping technology will stimulate an increase in Arctic shipping due to the region's abundant natural resources and increased maritime trade between Arctic regions.<sup>24</sup>

Although this analysis argues that the Northwest Passage is on the verge of experiencing a drastic increase in vessel traffic, the *current* volume of maritime transits through the Northwest Passage remains low relative to other popular international waterways. Much of this analysis extrapolates from a small sample size of data, the voyage of the *Orion*, for instance, but there does exist a useful case study with a larger data pool that might provide an insight into the future of the Northwest Passage. Russia's Northern Sea Route runs along its northern border from the Bering Strait in the West to Finland in the East, as shown in Figure 4, and shares many of the same characteristics as the Northwest Passage. The Northern Sea Route experienced its first ice-free summer in 2008 and is experiencing a decline in yearly sea ice and increasingly traversable periods during the summer and early fall, much like the Northwest Passage.<sup>25</sup> In 2011, just 41 vessels made complete transits of the Northern Sea Route.<sup>26</sup> In 2013, that number rose to 71.<sup>27</sup> Increasing interest in the Northern Sea Route from Asian shipping interests, particularly South Korea, suggest that the volume of maritime traffic will continue to grow.<sup>28</sup> Russia's Arctic strait appears well on its way to becoming a highly traversed international shipping route. Both the Northern Sea Route and the Northwest Passage present similar challenges—sailing through newly opened, sparsely populated straits still laden with ice for most of the year—but also provide profitable alternatives to the Suez and Panama Canals, respectively. International shipping is reacting to the changing global maritime landscape around Russia and facing the challenges of the Northern Sea Route. If a similar reaction occurs in the Northwest Passage, Canada and the United States will be faced with a host of new threats in the Arctic.



Figure 4 – Map of Northern Sea Route, including Exclusive Economic Zones (EEZs) (NorthwestPassage2012.blogspot, <http://northwestpassage2012.blogspot.com/2012/09/2011-northwest-passage-history-jeffrey.html>).

## II. Emerging Arctic security threats

Melting sea ice and the corresponding increase in maritime traffic in the Northwest Passage present new security threats for both the United States and Canada. ‘Security threats,’ as used here, represents a broad range of problems, including threats to the environment, human life, and larger continental security concerns. Negotiating a bilateral transit agreement is the first step in attempting to mitigate the risk associated with these various threats. The transit agreement does not provide a solution to each one of these threats specifically, but it does create a better, more collaborative environment in which the United States and Canada can begin to tackle these new problems.

### *Military confrontation*

It is important to begin any discussion of Arctic threats by dispelling a common rumor about the consequences of a thawing Arctic. Despite some political rhetoric and media speculation about ‘threats’ to Canada’s Arctic sovereignty and security, conventional military confrontation in the region seems unlikely. Although diplomatic sparring, especially between the United States and Canada, remains a part of Arctic affairs, all of the major players in the Arctic have chosen cooperation over conflict. The five nations with territory bordering the Arctic Ocean—Canada, Denmark, Norway, Russia, and the United States—met in Greenland in 2008 to discuss a multilateral approach to the governance of a changing Arctic. The resulting *Ilulissat Declaration* stated that the five coastal states would commit to responsibly and peacefully managing the Arctic Ocean under the prevailing international legal regime.<sup>29</sup> Countries still use the Arctic to make grand nationalistic claims from time to time, see Canada’s contest with Russia over the North Pole, but these actions are merely political rhetoric and present no real threat to sovereignty or security.<sup>30</sup> Despite deteriorating relations between the West and Russia in Eastern Europe, that political and military clash is not spilling over into the Arctic, despite media reports that might suggest otherwise.<sup>31</sup> Even the staunchly nationalistic Vladimir Putin will not let turbulent world events and Russian animosity of the West jeopardize Arctic cooperation. The economic upside of a peaceful Arctic incentivizes docility in the Far North from stakeholders like Russia, which wants to increase foreign investment and maritime traffic in its already prosperous Northern Sea Route. But increases in shipping will cause other problems, even if Arctic nations keep their militaries at bay. The combination of limited infrastructure, an incredibly cold and icy climate that is difficult to navigate, and the vastness of the North American Arctic exacerbates a slew of emerging threats to national security, human health, and the environment.

### *Oil drilling spill*

As the Arctic thaws, companies will look to extract its vast oil and gas reserves, increasing the likelihood of an oil spill in a region where emergency responders might not have the means to respond appropriately. Industry giants Exxon Mobil, Imperial Oil Canada, and British Petroleum filed a joint proposal with the National Energy Board, responsible for overseeing offshore gas and oil development in the Canadian Arctic, in 2013 for the rights to drill in the Beaufort Sea. Upon filing, the partners did not expect to get approval for at least three

years, but that did not stop them from pledging to spend \$1.7 billion in the area.<sup>32</sup> The joint proposal came despite a failed effort by Royal Dutch Shell to drill in the Beaufort Sea in 2012 that led the company to temporarily discontinue its Arctic operations due to a “crisis of confidence.”<sup>33</sup> Oil companies will keep probing the Beaufort Sea and the rest of the Arctic for drilling opportunities, possibly before sufficient regulatory regimes are in place to address the potential for an environmental disaster.

In an attempt to truly understand the environmental consequences of a drilling accident, the World Wildlife Fund (WWF) produced a report in 2014 analyzing 22 oil spill scenarios in the Beaufort Sea.<sup>34</sup> The WWF concluded that each scenario might result in hundreds of kilometers of shoreline oiling. Equally concerning, a report conducted by the Nunavut Planning Commission in 2014 concluded that almost nothing is known about how sea ice affects oil spills, and that the few oil spill models that do take sea ice into account tend to oversimplify the potential problems.<sup>35</sup> The consequences of an oil drilling accident, like the 2010 British Petroleum Deepwater Horizon disaster in the Gulf of Mexico, would be devastating in a place like the Beaufort Sea that has a fragile ecosystem and insufficient infrastructure to support a cleanup effort. The lack of relevant research on oil spills in icy waters exacerbates this threat.

### *Vessel leak or tanker spill*

Even if oil and other natural resources are extracted safely, they still need to be transported safely through Arctic waters. Canada does not have the capabilities to clean up a devastating oil tanker spill, or mitigate the potentially catastrophic environmental damage that a resource-laden ship could cause if it capsized. A tanker spill in Canadian waters would potentially threaten American territory as well. The 2014 WWF report analyzed the potential for ocean currents to carry spilled oil from Canadian waters to American waters. The report determined that if a tanker were to spill its contents in the Amundsen Gulf (refer to Figure 1 on page five) after completing a westward transit of the Northwest Passage, the northern coast of Alaska would likely be covered in oil.<sup>36</sup> Even if oil tankers pass through the Bering Strait and the American portion of the Beaufort Sea without incident, an accident in Canadian Arctic waters could directly threaten the natural environment of exclusively American Arctic regions. Such a scenario almost came to pass in 2010, when oil tanker *MV Nanny*, carrying nine millions liters of diesel fuel, ran aground near Gjoa Haven in the heart of the Northwest Passage’s southern-most route. More than five million liters of the *Nanny*’s fuel cargo had to be siphoned off onto another vessel before the tanker could be refloated. If a significant portion of the *Nanny*’s nine million liters of fuel had spilled into the Northwest Passage or Beaufort Sea, the environmental damage would have been catastrophic.

An incident in the fall of 2014 exposed the shortage of emergency response vessels operating in the Arctic, a deficiency that makes oil spills and vessel leaks especially dangerous. In October, a barge carrying a small amount of diesel fuel broke off from a Canadian tugboat and drifted into the American portion of the Beaufort Sea. The U.S. and Canadian Coast Guards were unable to initially secure the barge due to what American Coast Guard Commander Shawn Decker described as “very limited vessel options in the region right now due to the quickly developing ice and the overall limited number of vessels operating.”<sup>37</sup> After about a week of indecision, Canadian and American officials decided to let the barge drift for the remainder of the winter and wait until the following summer to bring the vessel back to shore. Like the incident with the *Nanny*, the Canadian barge incident ended without serious consequences. But

the inability of the Canadian and American Coast Guards to secure the barge illustrates the difficulties of responding to potential environmental threats.

The legal disagreement over the Northwest Passage exacerbates this potential threat and makes a bilateral transit agreement all the more pressing. NORDREG vessel reporting, initially implemented in 1977 as a voluntary safety measure for ships travelling in Canada's northern waters, was made mandatory by the Harper administration in 2010. The system requires foreign vessels to provide sailing reports and position updates, among other things, while in Canadian waters. But Canada's adoption of mandatory reporting within the NORDREG zone has no standing with the International Maritime Organization (IMO) and has been contested by multiple foreign nations, including the United States.<sup>38</sup> Vessels from foreign nations are not legally bound to meet Canadian requirements for ships passing through its Arctic waters, creating a troubling economic incentive. Traversing the Northwest Passage without the expensive upgrades recommended for safe passage, like ice-strengthened hulls and communications equipment, saves companies money but makes vessels more vulnerable to the perils of icy Arctic waters. An oil tanker sailing the Northwest Passage without the proper hull specifications, for instance, is much more likely to spring a leak and cause irreparable environmental damage than a vessel meeting Canada's NORDREG requirements. Although 99 percent of ships traversing Canada's Arctic waters voluntarily comply with vessel reporting procedures and vessel safety requirements, the problem remains that foreign ships are not legally obligated under international law to submit to the NORDREG requirements.<sup>39</sup> Therefore vessels can continue to ply Canada's Arctic waters ill prepared for the potentially dangerous journey. Compliance has yet to become a problem for Canada, but a much higher volume of vessel traffic will make enforcement of NORDREG procedures increasingly difficult. A larger number of transits will complicate enforcement, especially if foreign companies try to utilize the Northwest Passage without properly outfitted vessels in an attempt to cut costs.

### *Search and rescue deficiencies*

The lack of infrastructure that makes resource development and extraction so dangerous also poses a threat to human safety. Search and rescue procedures in the Arctic are woefully inadequate, as shown by the crash of a coast guard helicopter in September of 2013. The aircraft's three crewmen died, not from the impact of the crash, but by freezing to death in the cold Arctic water waiting over an hour for the icebreaker *Amundsen* to rescue them.<sup>40</sup> Canada's long-range helicopters capable of extracting survivors of such crashes are all stationed roughly a day's flight from the Northwest Passage, making them useless in cases such as that of the coast guard helicopter and its crew.<sup>41</sup>

The 2013 helicopter crash is one of several incidents in recent years that demonstrated the challenges of search and rescue operations in the Arctic. When the cruise ship *Adventurer* ran aground in 2010, the Canadian Coast Guard had to evacuate the ship's 128 passengers, plus crew members, and transport them to a local community on the *Amundsen*.<sup>42</sup> If a similar situation occurred with a cruise ship like the 1,070-passenger *Crystal Serenity*, scheduled to sail the Northwest Passage in 2016, the consequences would be much worse than those of the *Adventurer*'s grounding. Most Arctic search and rescue operations rely heavily on the support and infrastructure of local communities, but 1,000 stranded tourists, not to mention a large crew, would overwhelm Canada's northern infrastructure. Wade Spurrell, Deputy Commissioner for Operations of the Canadian Coast Guard, stated that northern infrastructure could handle 100 or

maybe 200 passengers in a search and rescue operation, like that of the *Adventurer*. But Spurrell went on to explain that much larger cruise ships would overwhelm northern infrastructure, and that the *Crystal Serenity* in particular would present a search and rescue challenge unlike anything the Canadian Coast Guard has ever seen.<sup>43</sup> As more ships traverse the Northwest Passage, Canada will be faced with daunting naval search and rescue challenges that it is currently incapable of managing. The Canadian military simulated an Arctic rescue mission in the fall of 2014 to prepare for another cruise ship accident like that of the *Adventurer*.<sup>44</sup> But the military conducted a simulated rescue of a vessel with only 50 passengers—a scenario that fails to properly simulate the logistical challenges of performing a similar operation for a much larger vessel like the *Serenity*.

The large volume of commercial air traffic that takes “transpolar” routes over Canada every year also poses a serious challenge for Canadian search and rescue operations stretched thin over a vast amount of territory. Colonel Norm Couturier, former commander of Canada’s Joint Task Force North, discussed what Canadian forces could do if a plane crashed on Ellesmere Island, located at the northernmost tip of Canada’s Arctic region. The colonel’s response is foreboding: “We could not get there.”<sup>45</sup> A 2009 National Defence Canada Command Backgrounder reported roughly 115,000 flights transiting the Canadian Arctic annually.<sup>46</sup> The unique climactic conditions of the Arctic present navigational challenges that increase the likelihood of a commercial airline crash in the Far North. Although such an event has not occurred to date and remains relatively unlikely compared to other search and rescue scenarios, the potential loss of life associated with a commercial plane crash coupled with an inadequate rescue effort is still realistic enough to concern Canadian military personnel. The same search and rescue capabilities that would mitigate the risk associated with increased vessel traffic would also address the threat of a commercial airline crash.

### *Unmonitored entrance to North America*

The Northwest Passage also serves as a potential inter-ocean transit route for terrorists, smugglers, or other undesirables trying to avert international maritime jurisdiction by utilizing an under-patrolled waterway, or attempting to infiltrate North America illegally. While Canada views the Northwest Passage in internal terms, the United States takes a more international approach towards the waterway. In the highly securitized post-9/11 world, the United States views ungoverned or unmonitored territory as a legitimate threat to national security. An under-patrolled access point into North America poses a critical threat to the U.S, which looks at the Northwest Passage in the context of continental defense. The lack of law enforcement and monitoring capabilities in the Northwest Passage and the inability to track foreign vessels within the North American Arctic allows illicit activities to take place directly under both nations’ noses.

In the face of these newly emerging security threats, it is important now more than ever that the United States and Canada come to terms with their differences on Arctic policy and establish a stronger working relationship going forward in the 21<sup>st</sup> century. The U.S. and Canada have shared close civil and military partnerships for decades, yet still have not been able to form a strong pact in the Arctic. Both nations must work towards common goals, recognizing their mutual interest in a secure and stable Arctic region. The longer the United States and Canada delay a resolution of the Northwest Passage dispute, the harder it will be for both nations to address emerging Arctic security threats. After resolving their legal dispute, the U.S. and Canada

will be able to establish a strong policy agenda in the Arctic that ensures a mutually beneficial security relationship.

### III. International law regime and Canadian sovereignty claims

The voyage of the *Nordic Orion* in 2013 and the likelihood of even more voyages makes Arctic sovereignty a pressing issue for Canadians, since an increase in maritime traffic could help justify American claims that the Northwest Passage is an international strait. The legal status of the Northwest Passage carries implications for how foreign vessels can enter and exit the waterway and what rules and regulations the coastal state can enforce. A bilateral transit agreement would sooth Arctic relations between Canada and the United States, ending the two nations' fight over this legal definition. But understanding the U.S. and Canadian legal positions and their implications requires a brief summary of the international legal regime for the law of the seas.

The International Court of Justice's ruling in the *Corfu Channel* case, brought before the ICJ in 1946 and resolved three years later, established the initial precedent for determining the qualifications necessary to define a body of water as an international strait.<sup>47</sup> The two prerequisites can be summarized as follows—the strait must connect two parts of the high seas and must have a history of being useful for international shipping.<sup>48</sup> The first requirement is easily satisfied by the Northwest Passage, since it connects the Atlantic and Arctic Oceans. Article 37 of the 1982 LOS convention simply reiterated this criterion.<sup>49</sup> It is the second requirement that has fueled the debate between Canada and the United States. The United States maintains that the Northwest Passage is an international strait because it holds the *possibility* for international shipping usage, even though there have been few transits of the waterway to date.<sup>50</sup> The Canadian government argues that the lack of historical use negates any claim that the Northwest Passage is an international strait based on the *Corfu Channel* case. Canadian Arctic scholar Donat Pharand agrees that lack of significant historical use weakens the U.S. argument that the Northwest Passage is an international strait, but also notes that this argument might become more plausible as maritime traffic increases.<sup>51</sup> The LOS convention superseded *Corfu Channel* as the standard for international maritime law. But the ambiguity of the conventions' articles allows both the United States and Canada to interpret its meaning in different ways. The *Norwegian Fisheries*' case, settled by the ICJ in 1951, also emphasizes actual use of a waterway before it can be classified as an international strait.<sup>52</sup> But neither the *Corfu Channel* case, nor the *Norwegian Fisheries*' case, nor the LOS convention establishes an easily discernable definition of an international strait.

With the Northwest Passage's status as an international strait up for debate, Canada has taken steps to prove that the Passage constitutes internal waters. The first of these Canadian sovereignty claims uses 'straight baseline theory.' Article 7 of the LOS convention provides a mechanism by which a nation can claim 'straight baselines' in order to delineate its internal waters. Under the straight baseline theory:

In localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured.<sup>53</sup>



Canada views the Arctic Archipelago as “a fringe of islands along the coast in its immediate vicinity,” and claims that all the landward water areas enclosed by the Archipelago comprise internal waters. The voyage of the *USS Polar Sea*, an American icebreaker, through Canada’s Arctic Archipelago in 1985 prompted the Canadian government’s initial use of the strait baseline theory. Minister for External Affairs Joe Clark formalized the straight baseline claim in a public statement shortly after the transit of the *Polar Sea* to ensure that the vessels transit did not pose a threat to Canadian sovereignty claims.<sup>54</sup> Although American commentators have rejected this straight baseline claim since its inception, the U.S. did not set forth its official views on the matter until 1994. In September of that year, the administration of President Bill Clinton clarified its strict interpretation of the LOS convention’s articles regarding straight baselines, basing its argument on the wording of particular phrases in Article 7.<sup>55</sup> Although scholars like Pharand note that the straight baseline theory should be enough to satisfy Canada’s claim over the Northwest Passage as an internal waterway, the United States takes advantage of the ambiguous language in Article 7 to argue against Canada’s use of straight baselines.<sup>56</sup>

Canada’s second tactic for asserting sovereignty over the Northwest Passage uses a historical approach. International law dictates that a nation can claim sovereignty over an internal waterway if it can claim historical title or exclusive authority over that waterway for an extended period of time.<sup>57</sup> To do so requires three conditions—a state must exercise exclusive jurisdiction over the area, it must have done so for a long period of time, and it must have acquiescence from foreign states.<sup>58</sup> Canada first claimed the Northwest Passage as historic internal water in 1973 and has continued to do so since then, citing the exploration and mapping of its Arctic waters by British explorers in the 1880s and subsequent policing and monitoring efforts in the Northwest Passage. Canada also cites thousands of years of use and occupation by the Inuit as proof of sovereignty.<sup>59</sup> These claims appear to satisfy two of the three conditions for successfully claiming historic title—exclusive state jurisdiction over a long period of time. But the third condition of a historical claim, international acquiescence, remains absent. Canada’s sovereign rights must be accepted by foreign nations, especially those that might be affected by such a claim, for the argument to have any merit.<sup>60</sup> Since the United States has always disputed Canada’s historic rights claim, international acquiescence cannot be proved in the case of the Northwest Passage.<sup>61</sup> The European Union, which encompasses major Arctic stakeholders like Finland, Sweden, Norway, Denmark, and Iceland, also disputes Canada’s claim, although it is not consistently vocal about the issue like the United States. In light of these international protests, even Pharand and other Canadian legal scholars, normally the loudest proponents of Canada’s legal claims over the Northwest Passage, recognize that its historic title claim is weak.<sup>62</sup>

Although Canada has not been able to assert full sovereignty over the Northwest Passage using the straight baselines or historic title arguments, Article 234 of the LOS convention did give Canada a small victory in terms of asserting its presence in the Arctic. The article applies to “ice-covered areas,” and stipulates that a coastal state can adopt certain rules and regulations to prevent and control pollution in those areas.<sup>63</sup> This article legitimized the Arctic Waters Pollution Act of 1970 and subsequent Canadian laws designed to protect Canada’s fragile Arctic maritime environment. Although the international community generally accepts Canada’s environmental protection measures under Article 234, such jurisdiction does not apply to foreign warships or other government vessels, leaving questions of state sovereignty and rights of passage up for debate.<sup>64</sup>

#### IV. Right-of-passage regimes relevant to Northwest Passage

Since Canada's historic claim to the Northwest Passage is incomplete, and the LOS convention is too ambiguous to validate Canada's straight baseline claim, the legal status of Canada's Arctic waters remains hotly debated. A resolution of the legal dispute would determine the right-of-passage regime applied to foreign vessels, which would in turn carry weighty implications for both the United States and Canada. If the Northwest Passage is an international strait, then foreign nations are entitled to transit passage, but if it is an internal waterway, then foreign nations have no rights of passage. A third scenario exists, where Article 8 of the LOS convention provides vessels the right of innocent passage in a state's internal waters.<sup>65</sup> In all three cases the LOS convention firmly establishes the rules and regulations by which a coastal state can govern a waterway and the freedoms of navigation ensured to foreign vessels:

##### *No Rights of Passage*

If the Northwest Passage is an internal waterway, then all of Canadian domestic law applies to the Arctic Archipelago, allowing Canada to assert its will unilaterally throughout its northern waters. Under this scenario, foreign vessels would require Canada's permission to travel through the Northwest Passage, a major threat to the U.S. position on freedom of the seas. Since Canada's historic title claim is weak, this scenario seems untenable.

##### *Innocent Passage*

Even if its 1985 straight baseline claim were valid, Canada would not be able to impose its will unilaterally in the Northwest Passage. Article 8 of the LOS convention states that a right of innocent passage would apply to the Northwest Passage if Canada's straight baseline claim closed off a waterway not previously considered as internal waters. Since the United States has opposed Canada's internal waters argument for decades, thus negating any historical title argument Canada might present, the Northwest Passage could not have constituted an internal waterway prior to Canada's straight baselines claim. Thus, a non-suspendable right of innocent passage would apply, even with an internationally accepted straight baseline claim. Innocent passage normally pertains to the territorial sea that extends 12 nautical miles out from a nation's coastline.<sup>66</sup> In this case, the same rules apply. Just like in a territorial sea, all foreign states would have the right to use the Northwest Passage, under certain conditions. Vessel passage must be continuous and expeditious, and the coastal state can impede any vessel's passage if it is deemed to be "prejudicial to the peace, good order or security of the coastal State."<sup>67</sup> This includes any launching or landing of aircraft onboard a vessel, any fishing or research activities, the loading or unloading of any person or commodity contrary to the domestic customs of the coastal state, any action not having a direct bearing on the passage, and several other stipulations.<sup>68</sup> Innocent passage also requires submarines to travel above water with their flag raised. The coastal state may also regulate the safety and navigation of maritime traffic, the preservation of the environment and reduction of pollution, the use of marine surveys and other research methods, and the prevention of infringement of customs and immigration laws, as long as its regulations are consistent with international standards.<sup>69</sup> Canada could not block the Northwest Passage from foreign use altogether, nor would it want to, but it could stop individual ships if necessary,

prevent submarines from travelling underwater, and limit the mobility of American aircraft—three highly undesirable restrictions for American naval strategy.

### *Transit Passage*

Transit passage applies to international straits and cannot be impeded by a coastal state, a key difference from the rights inherent under innocent passage.<sup>70</sup> Transit passage also extends to the air corridor above a waterway and allows submarines to travel through a strait submerged.<sup>71</sup> Article 42 of the LOS convention outlines the rules and regulations by which a coastal state can assert its authority over an international strait passing through its territory.<sup>72</sup> Absent from this list are many of the same rights of authority given to coastal states over internal waters, such as the right to limit the takeoff or landing of aircraft aboard sea craft. Whereas the right of innocent passage allows the coastal state to impede the travel of individual vessels, the regime of transit passage cannot be suspended or impeded under any circumstances. International straits share many characteristics, in terms of maritime rights, similar to those of the high seas. The right of transit passage is much more appealing to the U.S. government, which focuses on maintaining freedom of the seas across the globe in order to ensure the flexibility and swiftness of American naval movements.

## **V. The U.S. dilemma—fear of setting a precedent**

The United States refuses acquiescence to Canadian sovereignty claims for fear of losing the right of transit passage and setting a precedent for other international maritime areas. Freedom of the seas has long been a strategic goal of the United States. Ronald Reagan made this stance clear in his 1983 Presidential statement entitled *United States Ocean Policy*, which publicized American intent to protect overflight rights and other freedoms of the seas regardless of “unilateral acts of other states designed to restrict the rights and freedoms of the international community.”<sup>73</sup> Reagan’s statement was a clear rebuttal to Canada’s early attempts at establishing sovereignty over the Northwest Passage, and his message laid the groundwork for a developing U.S. Naval policy centered on the idea of freedom of the seas. One of the key features from the Navy’s 2009 Arctic Roadmap focuses on “freedom of navigation as a top national priority, linking the rights and responsibilities relating to navigation and overflight in the Arctic region with our ability to exercise these rights throughout the world.”<sup>74</sup> Key international straits like Malacca, Hormuz, and Gibraltar provide passage for tens of thousands of vessels a year, many of them involving direct U.S. financial or military interests. Acknowledging Canada’s sovereignty claim over the Northwest Passage and accepting the terms of innocent passage there might allow other foreign nations to restrict navigation rights through important international straits, or so the United States fears. Even more worrisome is the situation in the South China Sea, where China has taken increasingly antagonistic actions in recent years in an attempt to assert its sovereignty.<sup>75</sup> Although the South China Sea has few of the geographic characteristics of the Northwest Passage, China might attempt to use a Canadian sovereignty position in the Northwest Passage to strengthen its sovereigns claim over maritime territory it shares with less powerful nations like Vietnam. For the United States, Chinese interference with vessel transits of the South China Sea would be unacceptable disruption of global maritime stability.

U.S. anxiety over precedent setting may be unwarranted, though. Suzanne Lalonde and Frederic Lasserre conducted a detailed analysis of navigational rights in the world's major straits and concluded that Canadian sovereignty over the Northwest Passage should not be a real concern for the U.S. in any particular geographical areas.<sup>76</sup> Their report states that there are few cases around the globe where a strait's particular geography resembles that of Canada's Arctic Archipelago, and even in those few straits, the United States has little strategic interest. But Lalonde and Lasserre also make an important distinction between U.S. interest in specific maritime areas and U.S. interest in supporting the general principle of freedom of the seas. The United States does want to set a precedent for specific international cases, but, more importantly, it fears that Canadian sovereignty in the Northwest Passage would infringe upon the general principle of freedom of navigation. Lalonde and Lasserre describe this mentality as a fear of "creeping jurisdiction."<sup>77</sup> The United States has a general fear of anything that might infringe on global freedom of the seas and trigger similar infringements around the globe. The U.S. will continue to fight Canadian sovereignty claims for fear of setting a precedent, even if those fears are unwarranted. The only way to solve this problem is to negotiate a special bilateral agreement that assures Canada of protective rights over the Northwest Passage without creating a legal precedent that will hurt U.S. maritime interests abroad.

## VI. Current bilateral cooperation

Before climate change began to thaw the Arctic, American-Canadian cooperation was sufficient to render the legal dispute in the Northwest Passage harmless. Diplomatic sparring over the Northwest Passage accelerated in 1985 and eventually led to the Arctic Cooperation Agreement, which holds to this day. In May of that year, the United States informed Canada that it planned to send an icebreaker, the *USS Polar Sea*, through the Northwest Passage without a formal request to do so. It was a diplomatic move designed to ensure American navigation rights throughout Canada's Arctic Archipelago, although the U.S. State Department claimed that the voyage would not "prejudice the judicial position of either side regarding the Northwest Passage."<sup>78</sup> Despite U.S. intent to proceed with the voyage no matter what, Canada still provided Washington with permission to undertake the voyage.<sup>79</sup> Threatened by the *Polar Sea's* transit, Canada would begin articulating its internal waters argument much more clearly in the years to come. The *Polar Sea's* voyage served as a catalyst for negotiations on the Arctic Cooperation Agreement, the first sign of real cooperation between the United States and Canada in the Northwest Passage. This legal agreement prompted further bilateral cooperation in the Arctic. Since then, Canada and the United States have worked together with varying degrees of success on three different levels in the Arctic—political, military, and research.

### *Political*

The two nations signed the Arctic Cooperation Agreement in Ottawa in January of 1988 as a result of high-level diplomatic engagement between President Ronald Reagan and Prime Minister Brian Mulroney. The agreement promised bilateral cooperation in ensuring navigation by icebreakers of both countries in the Arctic and stated that all voyages by U.S. icebreakers in "waters claimed by Canada to be internal will be undertaken with the consent of the Government

of Canada.”<sup>80</sup> Consent in this case meant a general understanding that American icebreakers could enter the Northwest Passage without asking for permission, since it had already been granted through the Arctic Cooperation Agreement. This ensured that the voyages like those of the *Polar Sea* in 1985 could not infringe upon Canadian sovereignty claims. The agreement also stated:

Nothing in this agreement of cooperative endeavor between Arctic neighbors and friends nor any practice thereunder affects the respective positions of the Governments of the United States and of Canada on the Law of the Sea in this or other maritime areas or their respective positions regarding third parties.<sup>81</sup>

Essentially, the United States and Canada ratified an agreement to disagree with both sides protecting their long-term legal positions. The United States ensured that its icebreakers could travel at will in the Northwest Passage, and Canada reduced the possibility of further sovereignty challenges. At the time, the agreement dealt with the main dilemma both countries faced—icebreaker voyages. The agreement has become outdated, though, as the Northwest Passage now serves many other kinds of vessels during its increasingly traversable summer months.

The U.S. and Canada have also cooperated effectively in multilateral fora, like the Arctic Council. Established in 1996, the Arctic Council serves as a high-level intergovernmental forum for Arctic states and indigenous northern peoples. The Council is designed to foster interaction and promote cooperation between different players in the Arctic. The Council is comprised of eight member states—Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the United States—twelve permanent observer states, various indigenous representative groups, and a slew of intergovernmental and inter-parliamentary organizations. Under Canadian chairmanship, the Arctic Council has produced two main deliverables—the 2011 Arctic Search and Rescue Agreement and the 2013 Arctic Marine Oil Pollution Preparedness and Response Agreement. Both of these agreements affect the safety and security of the Northwest Passage and the rest of the Canadian and American Arctic regions far more than any bilateral efforts the two countries have taken. The United States and Canada have shown an exemplary ability to work together in this forum, especially under Canadian chairmanship since 2013. When the United States assumes the chair of the Arctic Council in May of 2015, this high level of cooperation within the multilateral forum will likely continue.

### *Military*

In spite of limited political and diplomatic cooperation, the American and Canadian militaries continue to produce successful bilateral initiatives with an Arctic focus. An increased focus on bilateral interoperability resulted in the U.S. addition to Operation NANOOK, a Canadian security exercise in place since 2007.<sup>82</sup> The U.S. has participated in the past five exercises, each using a different security scenario to enhance Canadian interoperability between government organizations and with other nations. The joint Canada-U.S. North American Aerospace Defense Command (NORAD), established in 1958, is another important cooperative military venture between the two nations. For decades, NORAD has served as a capable North American security agency and a mechanism for fostering bilateral military relationships. In 2012, NORAD commander Gen. Charles Jacoby spearheaded the “Norad Next” initiative, designed to “provide improved multi-domain coverage, particularly in the Arctic region.”<sup>83</sup> NORAD’s new

Arctic focus could serve as an important first step in fostering further bilateral Arctic security efforts.

The U.S. and Canadian militaries fostered another agreement in 2012 designed to safeguard Arctic interests. The Tri-Command Framework for Arctic Cooperation, signed by the Permanent Joint Board of Defense, emphasizes interagency collaboration in response to regional threats. The U.S. Department of Defense press release explained the program's intent "to promote enhanced military cooperation in the Arctic, particularly in support of safety, security and defense operations."<sup>84</sup> The framework emphasized collaboration between U.S. Northern Command, the Department of Defense's main instrument in the Arctic as of 2011, and Canada's Joint Operations Command. Royal Canadian Navy Commander Darren Rich noted that the agreement would encourage more cross-border training exercises in order to better prepare both nations' regional defense capabilities.<sup>85</sup>

These bilateral military initiatives are part of well-established military relationship between the United States and Canada, the closest military alliance on the planet. The relationship is so evolved that the U.S. Navy views American and Canadian ships as entirely interoperable—any Canadian ship deployed in a military operation is essentially allowed to take the place of an American ship.<sup>86</sup> This agreement is not Arctic-specific, although it is perhaps most useful in that region, one of the few parts of the world where the U.S. cannot unilaterally accomplish its naval objectives. The ability of both nations' militaries to collaborate despite diplomatic disagreements over the Northwest Passage is essential for Arctic security and shows that both the United States and Canada can work together to achieve common goals in the Far North. This type of collaboration is only the first step, though. The ability to foster bilateral agreements ensuring a strong working relationship between militaries is crucial to the overall mission of securing the Arctic, but a more concrete action plan is necessary to prepare the Northwest Passage to handle emerging security threats. A bilateral transit agreement would produce a better environment in which to build on robust bilateral military cooperation.

### *Research*

Perhaps the strongest area of cooperation between the United States and Canada in the Arctic is that of scientific research. The American cutter *Healy* worked side-by-side the Canadian icebreaker *Louie St. Laurent* for several years to conduct seabed analysis in the Beaufort Sea. While the *St. Laurent* broke the ice and performed seismic analysis, the *Healy* followed behind and performed the bathymetric analysis. Marc Meloche, senior policy analyst for the Canadian Polar Commission summarized the extent of research cooperation between the United States and Canada:

There have been some collaborative projects between Canadian and U.S. institutions—for example, on fish inventory in the Beaufort Sea. Science is sort of the one area where there is collaboration between the two nations, for sure. [The Canadian Polar Commission] works closely with colleagues at the U.S. Arctic Research Commission.... That's certainly an area of collaboration. I see that as getting even stronger as time goes by because countries and institutions realize that they can't do it all by themselves. There is a limit in terms of resources available for doing research, so people are collaborating.<sup>87</sup>

Meloche describes what has come to be called 'science diplomacy.' When high-level political talks stall, working-level scientific research continues, oftentimes with both American and

Canadian scientists working on the same projects. With similar goals in mind, and similar budget constraints, it is in the best interests of both nations' scientists and researchers to work together. Meloche's comments about the Canadian Polar Commission and the U.S. Arctic Research Commission illustrate that point. If there is one area where the United States and Canada have worked well together in the past, and will continue to work well together, it is in the field of scientific research. Unfortunately, research collaboration is not enough to stimulate infrastructure improvements and a stronger bilateral commitment to Arctic security.

## **VII. Canada's broken pledge to Arctic security**

The Canadian government has not prepared the Northwest Passage and the rest of the Arctic Archipelago for an increase in maritime traffic. Prime Minister Stephen Harper focused on Arctic sovereignty and security efforts during his 2006 campaign and continued to voice his commitment to the Arctic once in office. Harper has even taken a trip to Far North every year since his election in 2006, all as a part of his plan to make Canadian Arctic sovereignty "a major legacy of this government."<sup>88</sup> The Harper administration formally addressed this commitment in its 2008 Canada First Defence Strategy.<sup>89</sup> The comprehensive plan outlined six core missions for the Canadian military, including daily operations in the Arctic, and established a long-term funding framework to strengthen military capabilities. The Canada First plan intended to reverse cuts in defense spending levied by the administrations of the 1990s and early 2000s and revitalize the Canadian Forces. The plan proposed an additional \$490 billion over a 20-year period to fund, among other expenditures, six to eight Arctic Offshore Patrol Ships (AOPS), the replacement of 10-12 maritime patrol aircraft, 17 new search-and-rescue aircraft, and increased investment in rebuilding and maintaining Arctic infrastructure. The defense strategy also included improvements to radar and satellite capabilities in the Far North.

But the Harper administration has not matched its initial commitment. Defense spending waned as the administration faced an economic crisis in 2007-2008 and a balanced budget took priority over enhanced military capabilities. Funding decisions for major items of the Canada First plan, like the AOPS and maritime patrol aircraft, have been pushed beyond the 2015 election. The funding shortfalls are numerous. For instance, Canada recently agreed to replace its aging fleet of Sea King maritime helicopters with 28 new Cyclone helicopters at a price tag of \$7.6 billion.<sup>90</sup> But in an effort to save money, the government agreed to purchase the new helicopters without important safety requirements or the ability to perform a cold start, rendering them useless for Arctic operations. The planned refurbishment of Nanisivik's deep-water port, the only one of its kind in Canada's Arctic Archipelago, was downscaled in 2012 due to military spending cutbacks and recently pushed back until 2017 to coincide with the projected completion of the AOPS fleet.<sup>91</sup> In 2008, the Harper administration unveiled plans to build a state-of-the-art heavy icebreaker, the John G. Diefenbaker, but so far only \$720 million has been allocated for the project. The Canadian Coast Guard estimates the Diefenbaker will finish with a price tag of \$1.3 billion. Construction of the much-needed icebreaker will not begin until at least 2018 and might not be operational until 2022.<sup>92</sup> Even a start date of 2018 might be unrealistic, as the government has committed to building a pair of Joint Support Ships before steel is cut on the Diefenbaker. Both the Diefenbaker and the AOPS projects have already encountered long delays, casting doubt on whether the Canadian government's new estimated completion dates are

accurate, or merely wishful thinking. According to Captain C.J. Cassidy of the U.S. Navy, “There are some considerable challenges in the scheduling to continue to meet [Canada’s] stated goals and objectives.... There is enough doubt there to cause concern.”<sup>93</sup> Recent reports indicate that the Canadian government plans to further reduce funding for Arctic vessels, curtailing both the number and capabilities of its future icebreakers and Arctic supply ships.<sup>94</sup> These repeated delays and funding cuts illustrate the Harper administration’s inability to deliver on promises of increased Arctic capabilities.

The politicized nature of Canada’s Far North provides one possible explanation for this discrepancy between Arctic promises and Arctic realities. Although most Canadians live in close proximity to the U.S. border in the southern reaches of the country, there is a mystical quality to the Arctic that makes it an attractive issue for political candidates to discuss. Rhetoric about Arctic initiatives is an easy way to attract voters. According to Canadian Arctic scholar John Higginbotham, “Every [Canadian political] party can get political hay by chest thumping about Arctic sovereignty.”<sup>95</sup> It is not surprising that Harper beat the Arctic drum so often in his 2006 campaign only to delay any serious policy action or spending initiatives, since his Conservative government’s primary goal is to balance the federal budget.<sup>96</sup>

The current Conservative administration is not the first Canadian government to shirk its commitment to investment after promising to take action in the Arctic. Canadian politicians have promised Arctic infrastructure and defense spending in the past without keeping true to their word. Jean Chrétien’s administration proposed nuclear-powered submarines, polar icebreakers, an arctic underwater surveillance system, and new arctic patrol aircraft in the 1990s, but the projects all died on the “cutting-room floor of Canadian budgets, with little, if any, protest from the Canadian public.”<sup>97</sup> The current Conservative administration has cut similar Arctic spending measures from modern day budgets. Although Chrétien led a Liberal government and Harper heads a Conservative one, the parallels between the two administrations in terms of Arctic spending are quite similar. There is a crucial difference between Chrétien’s budgetary dilemmas of the 1990s and Harper’s present budget choices, though. Thanks to global climate change, Arctic security is a more pressing issue today than it ever was for Chrétien, or any other Canadian prime minister for that matter. By failing to follow through on its 2008 Defence First Strategy, the Harper administration has left Canada unprepared to handle problems currently arising in its own backyard.

## **VIII. U.S. Arctic capabilities also lacking**

It would be hypocritical to discuss the discrepancy between Canada’s Arctic promises and its Arctic deliverables without highlighting a similar trend in the United States, where current capabilities fail to match the U.S.’s stated goals for the Arctic region. Much like its Canadian counterpart, the American government has made the Arctic a high-profile issue but has failed to allocate the funding necessary to improve its inadequate Arctic capabilities. Recent reports from the Department of Defense, the White House, and various other federal agencies all highlight the Arctic as an important strategic area for the United States in the coming decades. Admiral Robert Papp, the recently appointed senior Arctic official for the State Department, continues to call for increased focus on the Arctic, a place with both immense economic



opportunity and serious security concerns.<sup>98</sup> But to date, the U.S. has not allocated enough resources towards accomplishing its goals in the Arctic.

Statements by the Department of Defense, the Coast Guard, and the White House all acknowledge that icebreaking is essential to the U.S. mission in the Arctic, and is perhaps the most important way to maintain a presence in the Far North, but the American icebreaker fleet remains under-developed. A June 2014 Congressional Research Service report by Specialist in Naval Affairs Robert O'Rourke detailed the inadequacy of the U.S. Coast Guard's current icebreaking capabilities.<sup>99</sup> The United States has only two heavy icebreakers, the *Polar Sea* and *Polar Star*, both of which have outlived their 30-year service lives. The Coast Guard placed the *Polar Sea* on inactive status in 2006 following an engine malfunction, leaving the United States with one operational heavy icebreaker and one medium icebreaker, the *Healy*, to serve all American icebreaking needs in both the Arctic and Antarctic. Both the *Polar Star* and the *Healy* operate out of Seattle, Washington. The two vessels cover all American icebreaker interests, including military operations and scientific research missions, from pole to pole. Although the Coast Guard plans to construct a new polar class icebreaker to replace the *Polar Star* around 2020, Congressional funding in recent years has fallen well short of the necessary allotments to reach the estimated \$1 billion needed for constructing a new vessel.<sup>100</sup> While the United States is struggling to fund a second heavy icebreaker, Russia operates a fleet of roughly 40 icebreakers and plans to have 11 more operational vessels by 2017.<sup>101</sup> Even the much smaller Arctic nations of Finland and Sweden maintain more robust icebreaking capabilities than the United States. Congress displayed an incredibly negative attitude towards the funding of additional icebreakers in the summer of 2014, indicating that the U.S. will continue to lag behind in this area for some time to come.<sup>102</sup>

American infrastructure in the Arctic also fails to meet operational needs. Although the U.S. Air Force, Navy, and Army all maintain facilities in the North American Arctic region, their capabilities for search and rescue and traditional military deterrence remain limited. Thule Air Force Base on the western coast of Greenland provides some support for the United States and its allies in the eastern region of Canada's Arctic Archipelago, but military infrastructure in and around the Beaufort Sea off the coast of Alaska is sparse. Much like Canada, the U.S.'s Arctic presence is mostly limited to the relatively ice-free summer months. Both nations have the ability to handle surge capacity if a military force needs to be stationed in the Far North for a period of time, but neither nation maintains a strong northern presence year round.<sup>103</sup>

Both the United States and Canada lack the necessary icebreaking capabilities, infrastructure developments, and overall strategic presence necessary to mitigate the multiple threats associated with an increasingly ice-free Arctic region. A lack of Arctic capabilities has already caused problems for both the United States and Canada. As the Arctic continues to thaw and maritime traffic increases, new threats will compound this already worrisome trend. A bilateral transit agreement is both nations' best chance to stimulate Arctic infrastructure and capabilities improvements that will mitigate these emerging threats.

## **IX. The importance of a bilateral transit agreement**

A bilateral transit agreement is not a cure-all for every problem that will come with melting sea ice and increased maritime traffic, but it will foster a more collaborative environment

between the U.S. and Canada in the Arctic. Both the U.S. and Canada have taken a firm public stance on Arctic preparedness, at least in terms of rhetoric. Both nations in principle agree on the measures that need to be taken to prepare the Arctic for increased vessel traffic. But to this point, both nations have failed to adequately address the evolving security situation in the North American Arctic. The fact that both the U.S. and Canada seem to agree on the importance of preparing the Arctic but have yet to agree on policy initiatives or find funding necessary for the required infrastructure and military expenses indicates that something needs to be done to catalyze change. A bilateral transit agreement is the catalyst. An agreement on the legal dispute in the Northwest Passage creates a more cooperative environment that will allow each nation to pursue its Arctic security goals in earnest instead of wasting time and energy bickering over legal matters. The result of this bilateral cooperation would hopefully be a corresponding increase in Arctic infrastructure investment.

A bilateral agreement would also be an opportunity for the United States and Canada to practice responsible, proactive governance instead of reactive governance. Will the two nations proactively set in motion the policy initiatives necessary to speed up the rate at which Arctic infrastructure is built and Arctic problems are addressed? Or will both nations refrain from taking action until a crisis occurs? The implications of the latter—reactive governance—should be concerning for both nations. It is only a matter of time before something goes wrong in the North American Arctic, or the Northwest Passage specifically, and U.S. and Canadian infrastructure is proven to be ineffective in reacting to the problem. Will the U.S. and Canada act now, or wait until the *Crystal Serenity* runs aground and strands 1,000 passengers plus crew in a desolate stretch of the Northwest Passage or until a drilling rig in the Beaufort Sea springs a leak and soaks hundreds of miles of Arctic coastline in oil? Even if the Northwest Passage does not become a major shipping route within the next decade, it is bound to see large increases in traffic as it becomes increasingly ice-free over the 21<sup>st</sup> century. Signing a bilateral transit agreement now will set the stage for the United States and Canada to prepare themselves for the coming challenges of a thawing North American Arctic and a traversable Northwest Passage. Negotiating a bilateral agreement will signal that the U.S. and Canada are committed to addressing problems before they arise, instead of simply reacting to catastrophic situations as they occur.

Even if the bilateral transit agreement does not stimulate further development in the Arctic, it does eliminate a somewhat embarrassing diplomatic disagreement that should be resolved, if for no other reason, than out of principle. The United States and Canada share the closest military and political alliance of any two nations in the world. The inability of the two nations to settle a simple legal disagreement is a blemish on the record of both nations' politicians and diplomats. Although such a settlement has historically been unnecessary with a mostly-frozen Northwest Passage, that is no longer the case. The Arctic Cooperation Agreement sufficed to handle this disagreement when only icebreakers could make the transit through the Canadian Arctic. But now it is evident that some extension of that agreement must be made in order to handle other kinds of vessel traffic. The inability of the U.S. and Canada, two nations with highly similar security concerns, political systems, and economic interests, to negotiate a bilateral agreement in the Northwest Passage is an unacceptable admission that neither country has the ability to settle simple legal disputes with its closest ally. As such, Canada and the United States should negotiate a bilateral transit agreement, not in the future, but as soon as possible.

## **X. A new bilateral transit agreement**

The bilateral transit agreement I am proposing is not a complete document but rather a set of key elements necessary to achieve the respective goals of Canada and the United States. Essentially, the new agreement would be an extension of the 1988 Arctic Cooperation Agreement, with a few caveats. First, all American vessels, not just icebreakers, would be granted transit rights in the Northwest Passage. Second, the agreement would acknowledge American and Canadian acceptance of the recently adopted IMO Polar Code guidelines to ensure a common set of Arctic shipping requirements. Like the ACA, signed by Reagan and Mulroney, the new bilateral agreement would not address the question of Canadian sovereignty over the Northwest Passage. These three main elements—transit rights for U.S. vessels, adoption of the IMO Polar Code, and an agreement not to address the legal status of the Northwest Passage—comprise the bulk of the bilateral deal. The specific wording is also important to prevent setting a precedent for other nations to make unjustified maritime sovereignty claims.

The bilateral agreement must provide a guarantee that American vessels traversing Canada's Arctic waters will have the same navigational rights as they would in any territorial sea. Under such an agreement, U.S. warships, submarines, and aircraft would not be bound by the limits of innocent passage, thus ensuring U.S. mobility in the Far North. Like the Arctic Cooperation Agreement, the new deal would give tacit Canadian permission for U.S. transits in general, not on a case-by-case basis. The agreement would establish an understanding between both nations that all American vessels traversing the Northwest Passage can do so at will because the Canadian government has already approved such voyages.

This agreement would clarify another aspect of the bilateral relationship in the Arctic—unreported submarine activity. Any submerged journey of a submarine through Canada's Arctic Archipelago is a violation of Canada's sovereign rights if the rights of transit passage do not apply. This explains Canada's silent acquiescence to U.S. submarine voyages through the Northwest Passage. Canadian officials allow U.S. submarines to traverse the Northwest Passage, but do not publically confirm these voyages for fear of weakening their sovereignty claims. There is even some question of whether Canada is aware of U.S. submarine activity in the Arctic at all, although a slip of the tongue by then Defense Minister David Collenette in 1995 indicated that there was a protocol for granting U.S. submarines permission to access the Northwest Passage.<sup>104</sup> The U.S. clearly has a submarine presence in the Canadian Arctic, but it is unclear whether the U.S. receives Canada's permission before sending submarines into the Northwest Passage.<sup>105</sup> Canada does not possess submarines that can travel beneath Arctic ice and is in no position to deny access to the U.S. Navy, which is increasing its focus on Arctic operations. A bilateral transit agreement would give the U.S. legal backing, which it currently lacks, to utilize the Northwest Passage for submarine operations. It would also prevent Canada from facing embarrassment if the full extent of American-Canadian naval cooperation in the Far North ever came to light, since any formal Canadian acceptance of American submarine transits without a specific bilateral agreement in place contradicts Canada's oft-stated position on Arctic sovereignty.

Even though the bilateral agreement accomplishes the American objective of securing transit rights in the Northwest Passage for ships and submarines, the only way to make the agreement palatable to American interests is to ensure that it does not take a position on Canadian sovereignty. What might seem like a very one-sided deal for the United States actually

proves beneficial to Canada as well for several reasons, mentioned here but covered further in the political feasibility section to follow. First, Canada benefits from the increased security of a more consistent U.S. naval presence in the Arctic. Second, Canada eliminates one of the largest threats to its sovereignty claims by ensuring that U.S. voyages through the Northwest Passage are all pre-sanctioned by the Canadian government. To accomplish this, the bilateral transit agreement should have phrasing much like that of the Arctic Cooperation Agreement stating that such a deal has no bearing on either nations' interpretation of the Northwest Passage's legal status.

For Americans, the sovereignty question and the fear of setting a precedent are major sticking points for this bilateral deal. For Canadians, relinquishing its sovereignty claim entirely is unthinkable. How do both nations go about addressing this issue in the Northwest Passage without opening the door for other nations to make similar claims in disputed maritime areas around the globe? There is not a general consensus to this question. Some officials in the U.S. State Department believe that such a deal is impossible without setting a precedent; that foreign nations will selectively ignore any part of a bilateral transit agreement that attempts to remove the legal status of the Northwest Passage from the discussion.<sup>106</sup> Here again, the ambiguity in international maritime law and how different nations interpret customary international law comes into play. Canadian legal scholar David Vanderzwaag offers a helpful hypothesis:

“[Negotiating a transit agreement] doesn't mean you prejudice the U.S. position, just say it's a very unique situation with our close neighbor, and we are just going to put it at bay with no prejudice to our positions in other parts of the world or any other situations. There is nothing to stop that from happening.”<sup>107</sup>

According to Vanderzwaag, the legal side of a bilateral agreement actually fits into international law in some sense. But like any legal issues, the political realities are oftentimes more important than what the lawyers say. Vanderzwaag goes on to explain:

“There is the political perception, and then there is the legal reality. That's the distinction to keep in mind. There is nothing to stop the US from coming up from a very carefully crafted agreement that would allow the position to be held, just like the 1988 agreement, but expand it out. But then of course there is that political perception that could be there.”<sup>108</sup>

It is this political perception that worries the United States. But Vanderzwaag also hints at how the U.S. and Canada might avoid the political nightmare of precedent setting. The “unique situation with our close neighbor,” as Vanderzwaag refers to the American-Canadian relationship, allows both nations to formalize an agreement without setting a precedent. Two aspects of the U.S. relationship with Canada are important here—geography and history. The geography and environmental conditions of the Canadian Arctic and the Northwest Passage are unique. No other global strait compares to the Northwest Passage, except perhaps the Northern Sea Route, an area of limited strategic importance for the U.S. The peculiarities of the Arctic environment provide the justification that the United States and Canada need to negotiate a bilateral agreement that does not prejudice either country's legal positions anywhere else around the globe. Second, the close relationship between the U.S. and Canada warrants special bilateral treatment that should not affect either country's relations with other nations. The U.S. and Canada share the world's longest border, trade military intelligence, and maintain \$2 billion every day in bilateral trade. The unique relationship between the two countries makes bilateral

action feasible without setting a precedent, according to Vanderzwaag.<sup>109</sup> Coming to some kind of legal agreement in the Northwest Passage can be presented as nothing more than two close neighbors attempting to mitigate rising threats in a region increasingly important to their continental security. The bilateral agreement, if crafted carefully, will prove so unique to the American-Canadian relationship that other countries will struggle to use it as basis for their own maritime sovereignty claims. China, for instance, would have a tough time politically trying to argue that the South China Sea faced any of the problems that necessitate an agreement like that in the Northwest Passage.

The final piece of any bilateral agreement should be an adoption of the IMO's Polar Shipping Code, a necessary step to ensure that the fragile North American Arctic environment remains undisturbed by increased vessel traffic. In November of 2014, the IMO finalized the first-ever binding set of international rules concerning shipping in polar regions.<sup>110</sup> Once the Marine Environment Protection Committee and the Maritime Safety Committee adopts the Polar Code in the spring of 2015, the environmentally conscious shipping regulations will be cleared to go into full effect in 2017.<sup>111</sup> Canada should update its NORDREG Arctic vessel requirements to match the standards laid out by the IMO. The Obama administration's 2014 Implementation Plan for the National Strategy for the Arctic Region outlines the U.S. goals of developing a polar code to standardize and enforce the construction, equipment, and operational requirements for ships traversing Arctic waters and to vessel tracking and waterways management schemes to ensure safe transit.<sup>112</sup> Canada has already put into place the procedural mechanisms to see that these goals are achieved—NORDREG requirements have operated efficiently since their initial implementation in 1977. Updating these reporting requirements to meet IMO standards will ensure that the bilateral agreement cannot come under attack for being too lenient on environmental protections. Formalizing Arctic shipping requirements and regulations between the U.S. and Canada is crucial if both nations desire to continue working together in the Arctic, both in terms of military operations and non-military ventures. Ensuring that Canada's already highly effective NORDREG procedures are in full compliance with the IMO's Polar Code will ensure the safety of vessel traffic in both nations' Arctic regions and align U.S. and Canadian regulations.

This bilateral transit agreement is not an original idea—scholars have debated the merits of such an agreement for years. This analysis, however, goes a step further by addressing the feasibility of negotiating such an agreement within the current political atmosphere of both nations. By analyzing various actors and trends within both the United States and Canada, my solution goes beyond the confines of an academic context by providing a workable policy solution for diplomats and politicians. The genesis of a bilateral negotiation does not have to be the United States, although this analysis is written from more of an American perspective. I assume that either the United States or Canada could initiate discussion of a bilateral transit agreement with a successful result.

## **XI. Feasibility of policy proposal – key actors**

Regardless of which nation initiates the discussion of a bilateral transit agreement, various actors on both sides of the border must be analyzed to determine the chances of a successful negotiation. The most important of these groups—the American and Canadian

governments, the U.S. Navy, the American and Canadian publics, and the private sector—all have interests in the Northwest Passage for differing reasons. Russia, Norway, and Iceland are potential stakeholders in decisions involving the Northwest Passage, but do not have any influence on this ability of the U.S. and Canada to negotiate a deal, and therefore are not discussed in this section. Considered here are only groups that could influence the negotiation of a bilateral deal.

### *Canadian government and public*

Although a bilateral transit agreement does not give Canada the outright acknowledgment of sovereignty that it wants, it does ensure that the foreign nation most concerned with the Northwest Passage—the U.S.—is in full cooperation with Canadian rules and regulations. The Canadian government is not worried about international precedent, only securing the Northwest Passage and the rest of its Arctic waters. As long as the United States obeys Canadian rules and regulations, the transit agreement poses no threat to Canadian sovereignty or security. It does just the opposite in fact. Canada has always benefitted from the continental security efforts of the United States, dating back to World War II. If a bilateral agreement lets the U.S. Navy operate at will in the Northwest Passage, Canada will continue to receive fringe benefits from an American naval presence. As American-Canadian relations expert Elizabeth Elliot-Meisel noted almost 20 years ago, “A modicum of American sovereignty sensitivity resulted in the United States getting nearly all it wanted from the Canadians in terms of defense cooperation” during World War II.<sup>113</sup> The same logic holds true today. A bilateral agreement gives Canada a sense of sovereignty over the Northwest Passage without explicitly stating it and allows the U.S. to operate in the Northwest Passage at will. The national security benefits that come with an increased U.S. Naval presence will placate Canadian nationalists, who otherwise might view a transit agreement as a potential threat to Canadian sovereignty without any tangible benefits.

As the Northwest Passage continues to open up, the U.S. will be more likely to send vessels into Canadian Arctic waters without permission, especially in the case of an emergency. These types of voyages, without pre-clearance from the Canadian government, are just the kind of precedent setting journeys that worry Canadians and give international maritime law scholars a reason to reinterpret the legal status of Northwest Passage as an international strait as opposed to internal waters. The bilateral agreement ensures that American transits do not negate Canadian sovereignty claims.

### *Republican Congress*

Pitching such an agreement to certain elements of the U.S. government will be much more difficult. The main reason the United States is not party to the LOS convention, and might have serious trouble negotiating a bilateral agreement with Canada, is due to intractable Republican leadership in the Senate. The Clinton, Bush, and Obama administrations have all supported accession to the LOS convention.<sup>114</sup> The Navy supports accession. Admiral Samuel Locklear, commander of U.S. Pacific Command, stated, “The convention in no way restricts our ability or legal right to conduct military activities in the maritime domain.”<sup>115</sup> Former Defense Secretary Leon Panetta even argued that accession to the convention would ensure U.S. maritime and overflight rights.<sup>116</sup>

Yet despite these endorsements, Senate Republicans refuse to support U.S. accession to the LOS convention. Republican Jim DeMint of South Carolina led a group of 34 senators in 2012 that promised to vote against accession should such a proposition come to Congress.<sup>117</sup> DeMint and his compatriots have two concerns with the LOS convention. First, they believe U.S. accession undermines American sovereignty interests in its own maritime waters. Second, the Senate Republicans worry that the LOS convention prevents the U.S. Navy from taking unilateral action around the globe as it sees fit.<sup>118</sup> It is this second line of reasoning that makes Republican support of a bilateral transit agreement unlikely. If Senate Republicans believe that becoming a signatory to the LOS convention would limit global maritime freedom and hamper the U.S. Navy, even though most other elements of the American government disagree, then agreeing to a bilateral transit agreement might be equally unattractive for them. Even an agreement that clearly avoids the question of sovereignty might cause concern for some in Congress who take a hard line on all freedom of the seas issues. Republicans like DeMint and his coalition might overlook the positive merits of a bilateral agreement, just like those of the LOS convention, for fear of doing anything to limit global maritime freedom and thus American naval operations.

#### *U.S. Navy*

Leveraging the support of the U.S. Navy could be key to pushing a bilateral transit agreement through the stalwart Republican Congress. Maintaining freedom of the seas globally is a top priority of the Navy. But Unlike Congressional Republicans, the Navy believes a balance can be struck between ensuring freedom of the seas globally and accepting the tenants of the LOS convention and a bilateral transit agreement. That is why the Navy advocates for U.S. accession to the LOS convention and would likely support a transit agreement that would give American naval vessels the ability to operate freely in the North American Arctic. It is a priority of the U.S. Navy to continue to educate and inform Congress regarding the advantages of becoming a party to the Law of the Sea Convention. This same process could be used to advocate for a bilateral transit agreement.

#### *American public*

The last element of the decision making process for a bilateral agreement is the American public, the true driver of political action in a highly partisan political climate. Unfortunately there is a passive attitude among the American public, and also most politicians, that the Arctic is not of pressing concern. The lack of American focus on the Arctic not only makes it more difficult to spend time working out a bilateral transit agreement but also complicates any attempts to allocate limited taxpayer dollars to projects without highly visible benefits for the everyday lives of the average American. Although Canada will shoulder the heavier burden in terms of infrastructure and equipment capabilities in the Northwest Passage, the U.S. will still have to improve its own Arctic capabilities despite a public that would most likely prefer to see government funds spent elsewhere. U.S. naval expert James Kraska outlines the American Arctic perspective well:

As a nation, the United States views the Arctic with relatively minimal interest compared to every other Arctic nation, and enjoys a lackadaisical attitude borne from the perspective of a country with strong Arctic allies and partners and the perception of a low-threat environment. Furthermore, the deep fiscal chasm of the U.S. federal budget augurs against great U.S.

leadership in the Arctic. Neither the Department of Defense nor other U.S. government agencies are likely to receive new appropriations for Arctic activities, which are viewed by Congress and the American people as peripheral to more pressing domestic and foreign policy needs.<sup>119</sup>

The United States has several obstacles to overcome if it wants to negotiate a bilateral transit agreement and develop adequate Arctic capabilities. First, the high costs of Arctic equipment and infrastructure will be difficult to fund due to military sequestration and an immense federal debt. Second, Americans are either unaware or unconcerned when it comes to Arctic threats, and politicians will not want to waste time negotiating the finer points of a transit agreement or allocating money for Arctic development without public support. Even if the funding for military capabilities and infrastructure can be found, it will not be easy to convince the American public, and therefore its representatives in Congress, that the money should be spent in an ice-covered region thousands of miles from the contiguous United States. The House Committee on Transportation and Infrastructure made this point painstakingly clear when it publically criticized military and State Department icebreaker funding requests during a summer 2014 Congressional hearing.<sup>120</sup>

### *Private sector*

Perhaps the strongest potential driver of a bilateral agreement could be the private sector, specifically the International Chamber of Shipping. At a 2013 summit in Oslo, the ICS met with Ministers from major shipping nations and the Secretary General of the International Maritime Organization to discuss the implications of a melting Arctic. The ICS urged the participants to focus on forming clear legal solutions for Arctic waters. ICS chairman Masamichi Morooka summarized the issue well by saying, “As remote Arctic sea routes become accessible these once academic issues are becoming increasingly important.”<sup>121</sup> The Northwest Passage is one of these sea routes where the legal dispute is no longer just a topic of discussion for scholars. Now the private sector is taking notice and pushing for a legal resolution that includes the right of transit passage for straits used in international shipping.<sup>122</sup> International shipping will follow the money, in this case using the Northwest Passage as a lucrative shortcut. That economic benefit will push organizations like the ICS to pressure both the U.S. and Canada to resolve their legal dispute. If the private sector can present a persuasive enough argument, it could serve to catalyze serious bilateral discussion about a transit agreement. Once a legal agreement exists for the Northwest Passage, it will encourage international shipping companies to use the waterway, catalyzing even more infrastructure development in the remote region.

## **XII. Feasibility – other stakeholders and driving factors**

Ensuring that the agreement satisfies all of the influential actors will be a challenge, but not an impossibility. But there are three other factors that might influence bilateral negotiations—the unresolved maritime boundary in the Beaufort Sea, Canadian and American election cycles, and land claims treaties between Canada’s government and native Inuit population. Each of these factors could influence the ability of the American and Canadian governments to come to an agreement in the Northwest Passage.



### *Extra bargaining chip – Beaufort Sea*

There is another legal dispute between the U.S. and Canada that might help to facilitate negotiations of a transit agreement. There is another bargaining chip on the table—the Beaufort Sea. Canada and the United States have disputed each other's territorial claims in the Beaufort Sea since 1976, resulting in a 21,436 square kilometer region of the sea, shown in Figure 5, that remains at issue. Like the rest of the Beaufort Sea, this sliver of water is likely resting atop large reservoirs of oil and could prove very economically beneficial to whichever nation's maritime boundary claim prevails. This dispute could be key in negotiating a transit agreement. The U.S. could concede in the Beaufort Sea and increase Canada's propensity to negotiate a bilateral transit agreement in the Northwest Passage. The two nations unsuccessfully attempted to negotiate this boundary dispute in the 1970s. Canada even indicated that it would be willing to trade losses in its Beaufort Sea territory for American concessions elsewhere.<sup>123</sup> If both nations can take a fresh look at this territorial negotiation with the same spirit of compromise of the 1970s, then the Beaufort Sea could be used as an effective bargaining chip to settle the Northwest Passage dispute.

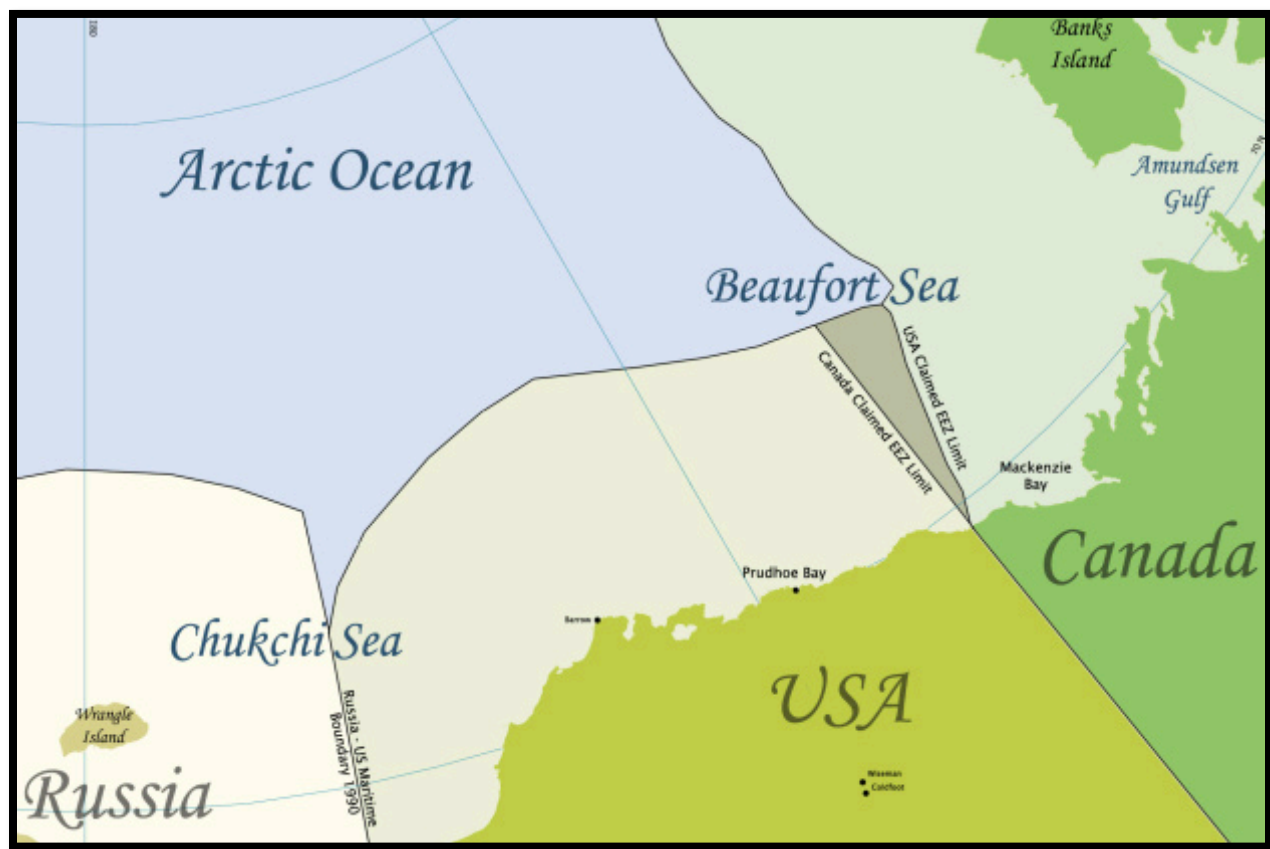


Figure 5 – Beaufort Sea boundary dispute between the U.S. and Canada (Arcticecon.wordpress.com, <http://arcticecon.wordpress.com/2011/01/10/beaufort-sea-dispute/>).

### *Political turnover*

Despite all the benefits associated with a bilateral transit agreement, the highly politicized nature of the Northwest Passage dispute has made an agreement in the immediate future unlikely. Neither country's current political climate is conducive to solving this problem. Harper has played up Arctic sovereignty concerns throughout his years in office and seems unlikely to sign any agreement that does not include an explicit recognition of the Northwest Passage as internal Canadian waters. The Harper government could be ousted in the next federal election, likely occurring in 2015, but the rising Liberal party has not given any indication that it will be a more cooperative Arctic partner. On the U.S. side, things are even worse. When asked what this paper should be called, John Higginbotham retorted, "Memo for a new president," indicating the impossibility of any bilateral deal passing through the White House during the remaining years of the Obama administration. Entrenched Republicans in both houses of Congress will likely oppose a bilateral agreement, under the same misguided logic behind the opposition of the LOS convention, making a bilateral deal somewhat of a dead issue for the next two years, at least. A bilateral deal might not be tenable before a complete turnover of both nations' federal governments occurs.

### *A complicating factor – Canada's Inuit and land claims agreements<sup>124</sup>*

The Canadian government has negotiated several land claims agreements with native Inuit peoples that could complicate bilateral negotiations. For instance, the 1993 Nunavut Land Claims Agreement established Inuit rights over a massive swath of northern Canada, including the historically ice-covered Northwest Passage, as illustrated in Figure 6. The agreement specifies the "rights for Inuit to participate in decision-making concerning the use, management and conservation of land, water and resources, including the offshore," and to "provide Inuit with financial compensation and means of participating in economic opportunities" within the borders of the land claims agreement.<sup>125</sup> The agreement includes "marine areas" as well, which are defined as "that part of Canada's internal waters or territorial sea, whether open or ice-covered, lying within the Nunavut Settlement Area," and includes the "seabed and subsoil below those internal waters or territorial sea."<sup>126</sup> This means that the government of Canada has legally ceded a host of rights to Inuit communities in Nunavut, including rights to the waters of the Northwest Passage and the seafloor below. The implications of this could be huge for bilateral relations between the United States and Canada in the Northwest Passage.

The 1984 Inuvialuit Final Agreement poses a similar problem for bilateral negotiations. The settlement officially granted Inuit rights over 435,000 square kilometers, known as the Inuvialuit Settlement Region (ISR) in the Amundsen Gulf, Mackenzie Delta, and the Beaufort Sea.<sup>127</sup> This agreement, like the Nunavut Land Claims Agreement, has large implications for how Canada might go about negotiating a bilateral transit agreement with the United States. But it also has implications for the other bargaining chip currently on the table—the negotiation of the Beaufort Sea boundary dispute. If Canada and the United States were to split the disputed portion of the Beaufort Sea in half, then a portion of the ISR, shown in Figure 6, would lie in American territory. This complication could take the Beaufort Sea off the negotiating table entirely. Or it might affect the way in which the United States and Canada can use the Beaufort

Sea as an additional bargaining chip. In order to prevent unwanted legal complications, the United States might have to cede more than half of the disputed maritime area, thus ensuring that all of the ISR would remain in Canadian territory. Either way, Inuit rights over this region present a unique challenge to the Canadian government.

The Kitigaaryuit Declaration, issued by the Inuit Circumpolar Council (ICC) in 2014, gives insight as to how the Inuit community might respond if not included in bilateral negotiations.<sup>128</sup> The declaration insists that all bilateral talks involving Inuit concerns, such as the Inuit controlled parts of the Northwest Passage and Beaufort Sea, include the ICC at the negotiating table.<sup>129</sup> The declaration also instructs the ICC leadership to urge Arctic states to include Inuit in continental shelf submissions to the LOS convention.<sup>130</sup> Both these points show that the Inuit community, especially in Canada, is becoming more aggressive in demanding a voice among negotiations between foreign nations. Under the LOS convention, the Inuit do not possess any rights since they are not an actual nation state. Yet the ICC continues to fight for a greater voice in the international Arctic community. It should be noted that the ICC represents the entire international Inuit community, not just that of Canada. If the Canadian government agreed to allow Inuit representation for any bilateral negotiations, then the Inuit Tapiriit Kanatami (ITK)—the representative body for Canada's roughly 55,000 Inuit—would be at the table, not the ICC. The Inuit community in Canada has proved to be a strong negotiator, and its willingness to push for greater rights on the international stage suggests that it will raise its voice for any Northwest Passage talks. Any transit agreement with the United States that fails to address the needs of the Inuit community could cause enough domestic backlash to torpedo a deal.

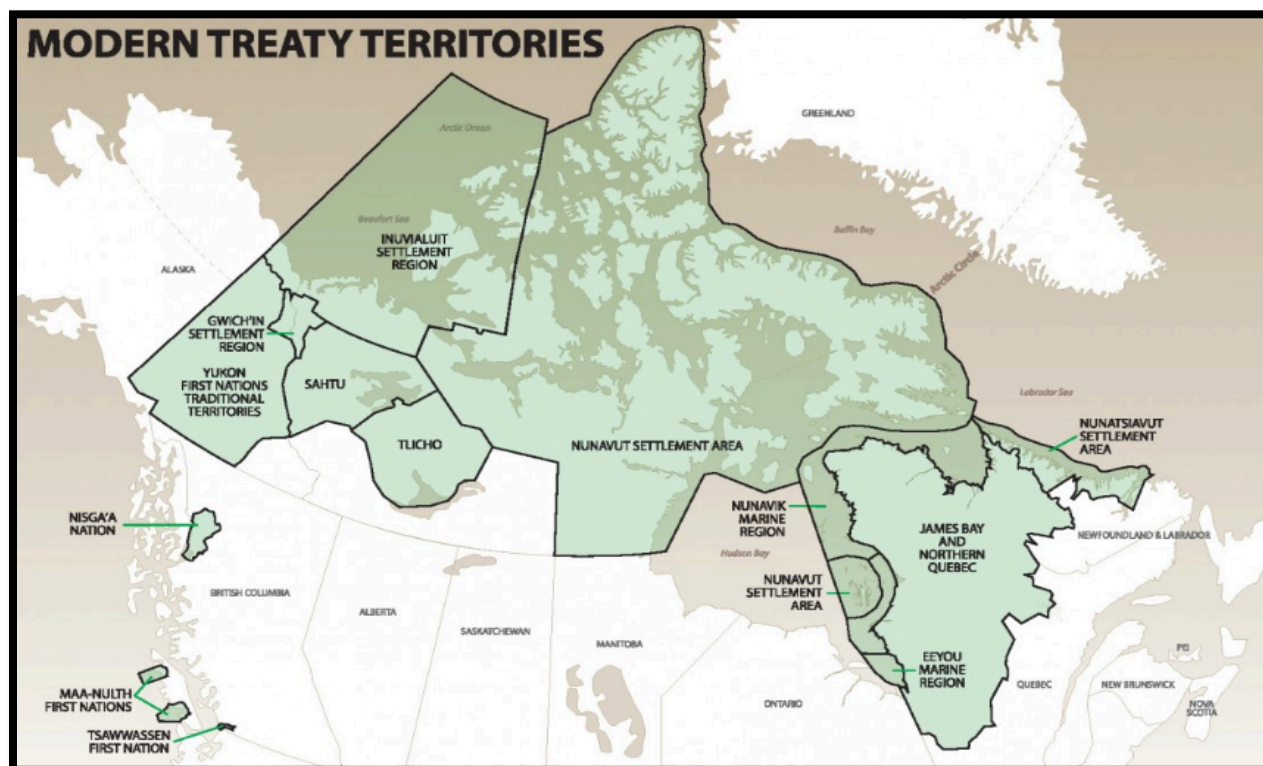


Figure 6 – Modern lands claims agreements negotiated between the Canadian government and Inuit groups. Of special consideration here are the Nunavut Settlement Area and the Inuvialuit Settlement Agreement (Land Claims Agreements Coalition, <http://www.landclaimcoalition.ca/modern-treaties/>).

The creation of modern treaties between Canada and the Inuit has been a game changer in the evolution of these issues. Both the Nunavut Land Claims Agreement and the Inuvialuit Final Agreement are legally binding settlements between the Canadian government and Canada's Inuit, a highly organized politically active group. It is difficult to determine exactly what impact these treaties might have on bilateral negotiations between the U.S. and Canada, but it is safe to say that the Canadian Inuit will not be satisfied with any deal that does not account for their sovereign rights over Arctic territory, including the Beaufort Sea and the Northwest Passage. Addressing this issue will be essential to successfully negotiating a bilateral transit deal.

## **Conclusion**

The Northwest Passage is a high-priority continental security issue for both the United States and Canada, and a bilateral transit agreement needs to be negotiated to ensure effective collaboration and to mitigate emerging Arctic threats. The status quo in the Northwest Passage is unacceptable, and a lack of bilateral action will result in underdeveloped infrastructure and the inability to mitigate potential risks. Prominent Arctic scholars like Franklyn Griffiths and John Higginbotham have been promoting a bilateral legal solution for years. Their recommendations are especially pertinent today. The security situation is deteriorating faster than policy improvements can be made, and the legal debate has evolved from an academic exercise into a continental security imperative. Even if the Northwest Passage is not fully ice-free for years to come, it is a security risk right now, and any infrastructure improvements will take years to complete because of the difficulties of working in the harsh Arctic environment. The United States and Canada need to take steps as soon as possible to stimulate Arctic development that will emerging security threats.

A bilateral transit deal is possible, especially following political turnover in both nations. The U.S. could also use its position as the chair of the Arctic Council, which it will assume in 2015 and hold for two years, to focus on the resolution of legal disputes in the Arctic. If the U.S. and Canada fail to resolve the Northwest Passage dispute, both nations will soon find themselves without the infrastructure necessary to capitalize on a fantastic economic opportunity and unprepared to face a slew of emerging continental security threats. This policy recommendation provides serves as the first step towards a brighter, more collaborative future for the United States and Canada in the Northwest Passage and the entire Arctic region.

## Endnotes

<sup>1</sup> Sea ice generally refers to one of two categories—first-year, or seasonal, ice and multiyear ice.

<sup>2</sup> Larissa Pizzolato, Stephen Howell, et al., “Changing Sea Ice Conditions and Marine Transportation Activity in Canadian Arctic Waters Between 1990 and 2012,” *Climactic Change*, Vol. 123 (December 19, 2013).

<sup>3</sup> David W. Titley and Courtney C. St. John, “Arctic Security Considerations and the U.S. Navy’s ‘Arctic Roadmap,’” In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 267-280. New York: Cambridge University Press (2011).

<sup>4</sup> Craig Medred, “Expert predicts ice-free Arctic by 2020 as UN releases climate report,” *Alaska Dispatch News*, November 2, 2014.

<sup>5</sup> National Snow and Ice Data Center, *Arctic Sea Ice News and Analysis: Arctic sea ice extent settles at record seasonal minimum*, September 19, 2012.

<sup>6</sup> National Snow and Ice Data Center, *Arctic sea ice continues low; Antarctic ice hits a new high*, October 7, 2014.

<sup>7</sup> Ibid.

<sup>8</sup> Donat Pharand, “The Arctic Waters and the Northwest Passage: A Final Revisit,” *Ocean Development and International Law*, 38:1-2 (2007).

<sup>9</sup> Pizzolato, Howell, et al., “Changing Sea Ice Conditions and Marine Transportation Activity,” *Climactic Change* (December 19, 2013).

<sup>10</sup> The Canadian Coast Guard provides the geographic bounds of the NORDREG zone: “Northern Canada Vessel Traffic Services Zone (NORDREG) includes the shipping safety control zones prescribed by the Shipping Safety Control Zones Order, the waters of Ungava Bay, Hudson Bay and Kugmallit Bay that are not in a shipping safety control zone, the waters of James Bay, the waters of the Koksoak River from Ungava Bay to Kuujuaq, the waters of Feuilles Bay from Ungava Bay to Tasiujaq, the waters of Chesterfield Inlet that are not within a shipping safety control zone, and the waters of Baker Lake, and the waters of the Moose River from James Bay to Moosonee.” Source from [http://www.ccg-gcc.gc.ca/eng/MCTS/Vtr\\_Arctic\\_Canada](http://www.ccg-gcc.gc.ca/eng/MCTS/Vtr_Arctic_Canada).

<sup>11</sup> Pharand, “The Arctic Waters and the Northwest Passage,” *Ocean Development and International Law*, 38:1-2 (2007).

<sup>12</sup> John McGarritty and Henning Gloystein, “Big freighter traverses Northwest Passage for 1<sup>st</sup> time,” *Reuters*, September 27, 2013.

<sup>13</sup> Peter Farquhar, “A Cargo Ship Just Completed a Historic Trip Through the Northwest Passage,” *Business Insider*, October 2, 2014.

<sup>14</sup> The *Nunavik* is rated as a Polar Class 4 vessel, meaning it can withstand year-round operations in first-year ice. Information from the *Nunavik*’s log book, found at <http://www.fednav.com/en/voyage-nunavik>.

<sup>15</sup> Bob Weber, “More Northwest Passage travel planed by Danish shipper,” *CBC News*, January 3, 2014.

<sup>16</sup> Guy Killaby, “‘Great Game in a Cold Climate’: Canada’s Arctic Sovereignty in Question,” *Canadian Military Journal* (Winter 2005-2006): 33.

<sup>17</sup> Killaby, “Great Game in a Cold Climate,” *Canadian Military Journal*, 33.

<sup>18</sup> Information from the Canadian mining company Baffinland; refer to [Baffinland.com](http://Baffinland.com), “Baffinland Begins Mining Iron Ore,” October 9, 2014.

- 
- <sup>19</sup> From source in Ron Wallace's, "Emerging Canadian Priorities and Capabilities for Arctic Search and Rescue," *Canadian Defence and Foreign Affairs Institute* (January 2012): 5.
- <sup>20</sup> Terrell Johnson, "Climate Change Tourism Comes to the Arctic: \$20,000 Luxury Cruise to Sail the Once-Unnavigable Northwest Passage," *The Weather Channel*, (July 29, 2014).
- <sup>21</sup> Franklyn Griffiths, "Pathetic Fallacy: That Canada's Arctic Sovereignty is on Thinning Ice," *Calgary Papers in Military and Strategic Studies*, Occasional Paper No. 4: *Canadian Arctic Sovereignty and Security: Historical Perspectives* (2011): 401-422.
- <sup>22</sup> Wendy Stueck, "Groundbreaking Northwest Passage voyage almost foundered over insurance," *The Globe and Mail*, October 2, 2013.
- <sup>23</sup> International Chamber of Shipping, *Position Paper on Arctic Shipping*, (December 2012).
- <sup>24</sup> *Ibid.*, 2.
- <sup>25</sup> Joshua Ho, "The Arctic Meltdown and Its Implications for Ports and Shipping in Asia," In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 33-43. New York: Cambridge University Press (2011): 39.
- <sup>26</sup> Northern Sea Route Information Office, *Transit Statistics 2011-2013*, Operated by the Centre for High North Logistics (CHNL). Statistics can be found at [http://www.arctic-liaison.com/nsr\\_transits](http://www.arctic-liaison.com/nsr_transits).
- <sup>27</sup> *Ibid.*
- <sup>28</sup> Mia Bennett, "South Koreans take first Northern Sea Route cargo delivery from Russia," *Alaska Dispatch News*, October 29, 2013.
- <sup>29</sup> Arctic Ocean Conference, *The Ilulissat Declaration*, Ilulissat, Greenland, May 28, 2008.
- <sup>30</sup> Rob Huebert, "Is Canada ready for Russia's hardball approach to the North Pole?" *The Globe and Mail*, January 30, 2014.
- <sup>31</sup> Brian Stewart, "Putin gets payback for Canada's anti-Russia stance," *CBC News*, June 27, 2014.
- <sup>32</sup> "Oil companies seek to drill in deep Beaufort Sea," *CBCNews*, September 27, 2013.
- <sup>33</sup> Yereth Rosen, "Shell halts 2013 drilling plans in Alaska's Arctic seas," *NBC News*, February 28, 2013.
- <sup>34</sup> "Modeling Oil Spills in the Beaufort Sea; Exploring the Risk: What would happen if oil spills in the Beaufort Sea?" *World Wildlife Fund Canada*, Summary Report (2014): 36.
- <sup>35</sup> Nunavut Planning Commission, *Oil Spill Detection and Modeling in the Hudson and Davis Straits*, Prepared by LOOKNorth Centre of Excellence for Commercialization and Research, Final Report R-13-087-1096 (May 29, 2014).
- <sup>36</sup> "Modeling Oil Spills," *World Wildlife Fund Canada* (2014): 20.
- <sup>37</sup> Tegan Hanlon, "US, Canadian agencies monitoring diesel-carrying barge adrift in Arctic," *Alaska Dispatch News*, October 23, 2014.
- <sup>38</sup> Andreas Raspotnik, "Positive Unilateralism – An Effective Strategy to Protect the Canadian Arctic Environment or a Subtle Approach to Establish Sovereignty?" *The Arctic Institute – Center for Circumpolar Studies* (December 23, 2011).
- <sup>39</sup> Pharand (2007).
- <sup>40</sup> Michael Byers, "Canada's Arctic nightmare just came true: The Northwest Passage is commercial," *Globe and Mail*, September 20, 2013.
- <sup>41</sup> Byers, "Canada's Arctic nightmare," *Globe and Mail*, 2013.
- <sup>42</sup> "Stranded Arctic cruise passengers head home," *CBC News*, August 30, 2010.

---

<sup>43</sup> Interview with Wade Spurrell, Deputy Commissioner for Operations of the Canadian Coast Guard, August 8, 2014.

<sup>44</sup> Information from National Defence and the Canadian Armed Forces at <http://www.forces.gc.ca/en/operations-canada-north-america-recurring/op-nanook.page>.

<sup>45</sup> Quote taken from an interview in Byers, *Who Owns the Arctic* (Vancouver: Douglas & McIntyre Inc., 2009), 69.

<sup>46</sup> Source found in Ron Wallace's, "Emerging Canadian Priorities and Capabilities for Arctic Search and Rescue," (2012): 5.

<sup>47</sup> Great Britain brought the *Corfu Channel* case to the ICJ in 1946 after several maritime encounters with Albanian vessels resulted in damages to the British Royal Navy. The ICJ heard the case from 1947 to 1949 and handed down rulings dealing with both the right of innocent passage and state responsibility for damages at sea. The concept of innocent passage used by the ICJ became commonplace in international maritime law following the *Corfu Channel* decision. The 1982 LOS convention would integrate innocent passage into its articles, superseding the *Corfu Channel* case and all prior ICJ and UN rulings on international maritime law. (*Corfu Channel Case*, Judgment of April 9, 1949: ICJ Reports 1949, p. 4. Source can be found at <http://www.icj-cij.org/docket/files/1/1645.pdf>).

<sup>48</sup> Pharand (2007).

<sup>49</sup> United Nations Division for Ocean Affairs and the Law of the Sea, *United Nation's Convention on the Law of the Sea*, (December 10, 1982). (hereafter referred to as 'LOS Convention').

<sup>50</sup> Pharand (2007).

<sup>51</sup> Ibid.

<sup>52</sup> The *Norwegian Fisheries* case was brought to the ICJ in 1949 as part of the United Kingdom's attempt to get a ruling on how far Norway's territorial sea extended from its coastline. The final judgment awarded the UK damages based on Norwegian disruptions of British fishing vessels in the high seas and built off the *Corfu Channel* case to further clarify international law regarding the ownership of local maritime areas. (International Court of Justice. *Norwegian Fisheries Case*, Judgment of December 18, 1951: ICJ Reports 1951, p. 116. Source can be found at <http://www.icj-cij.org/docket/files/5/1809.pdf>).

<sup>53</sup> LOS Convention, Article 7.

<sup>54</sup> Government of Canada, House of Commons, *Debates*, 33<sup>rd</sup> Parliament, 1<sup>st</sup> session, Vol. V (1985), September 10, 1985 (Ottawa 1985), 6463.

<sup>55</sup> As part of its agreement to ratify the LOS convention, the Clinton administration submitted certain interpretations of the convention's articles. For instance, the U.S. stipulated that the phrase "a fringe of islands along the coast in its immediate vicinity," a portion of Article 7 concerning straight baselines, should only be applicable to areas where "each island to which a straight baseline is to be drawn is not more than 24 miles apart from the island from which the straight baseline is drawn." In essence, this interpretation would negate Canada's straight baseline claim, since the islands of the Arctic Archipelago are more than 24 miles apart in some places; refer to [http://www.foreign.senate.gov/imo/media/doc/treaty\\_103-39.pdf](http://www.foreign.senate.gov/imo/media/doc/treaty_103-39.pdf).

<sup>56</sup> Pharand (2007): 23.

<sup>57</sup> Suzanne Lalonde and Frederic Lasserre, "The Position of the United States on the Northwest Passage," *Ocean Development and International Law* (February 5, 2013).

<sup>58</sup> Government of Canada, Law and Government Division, *Canada's Legal Claims Over Arctic Territory and Waters*, By Robert Dufresne, Parliamentary Research Service (December 2007): 11.

<sup>59</sup> Joe Clark, Secretary of State for External Affairs, Statement on Sovereignty, September 10, 1985, reprinted in Michael Byers, *International Law and the Arctic* (New York: Cambridge University Press, 2013), 132.

<sup>60</sup> Lalonde and Lasserre, "The Position of the United States on the Northwest Passage," (2013).

<sup>61</sup> Pharand (2007).

<sup>62</sup> Ibid.

<sup>63</sup> LOS Convention, Article 234.

<sup>64</sup> GOC, *Canada's Legal Claims*, (2007), 12.

<sup>65</sup> LOS Convention, Article 8.

<sup>66</sup> Ibid., Article 17.

<sup>67</sup> Ibid., Articles 18 & 19.

<sup>68</sup> Ibid., Article 19.

<sup>69</sup> Ibid., Article 21.

<sup>70</sup> Ibid., Article 38.

<sup>71</sup> Ibid., Article 39.

<sup>72</sup> Ibid., Article 42.

<sup>73</sup> *United States Ocean Policy*, Statement by the President – Administration of Ronald Reagan, March 10, 1983, accessed via the National Oceanic and Atmospheric Association at [http://www.gc.noaa.gov/documents/031083-reagan\\_ocean\\_policy.pdf](http://www.gc.noaa.gov/documents/031083-reagan_ocean_policy.pdf).

<sup>74</sup> United States Navy, *Navy Strategic Objectives for the Arctic: Memorandum for Distribution*, by Admiral G. Roughead, Washington, D.C.: Chief of Naval Operations (2010).

<sup>75</sup> Information comes from interviews with Captain C.J. Cassidy, U.S. Naval Attaché at the United States Embassy in Ottawa, summer 2014.

<sup>76</sup> Lalonde and Lasserre (2013).

<sup>77</sup> Ibid., 62-63.

<sup>78</sup> State Department Note No. 222 of 24 June 1985, as quoted in Diplomatic Note NO. 433, July 31, 1985, reprinted (in part) in Byers, *International Law and the Arctic*, 136.

<sup>79</sup> Diplomatic Note No. 433, 31 July 1985, reprinted (in part) in Byers, *International Law and the Arctic*, 136.

<sup>80</sup> "Canada and the United States of America: Agreement on Arctic Cooperation," Canada Treaty Series No. 31529, available at <https://treaties.un.org/doc/publication/unts/volume%201852/volume-1852-i-31529-english.pdf>.

<sup>81</sup> Ibid.

<sup>82</sup> Operation NANOOK takes place annually in several locations across the Yukon, the Northwest Territories and Nunavut. Its objectives are to assert Canada's sovereignty over its northernmost regions, to enhance the Canadian Armed Forces' ability to operate in Arctic conditions, to improve coordination in whole-of-government operations, and to maintain interoperability with mission partners for maximum effectiveness in response to safety and security issues in the North. Information from National Defence and the Canadian Armed Forces at <http://www.forces.gc.ca/en/operations-canada-north-america-recurring/op-nanook.page>.

<sup>83</sup> David Pugliese, "Norad to increase focus on Arctic surveillance," *Ottawa Citizen*. March 3, 2014. Quote taken from May 2012 briefing paper obtained under the Access to Information law.



---

<sup>84</sup> Donna Miles, "U.S., Canada Expand Arctic Cooperation, Military Training," *U.S. Department of Defense*, American Foreign Press Service (December 11, 2012).

<sup>85</sup> Ibid.

<sup>86</sup> Personal interviews with the aforementioned Capt. Cassidy, U.S. Navy, and Captain Kory Benz, U.S. Coast Guard Attaché at the United States Embassy in Ottawa, summer 2014.

<sup>87</sup> Interview with Marc Meloche, senior policy analyst for the Canadian Polar Commission, July 29, 2014.

<sup>88</sup> Kathleen Harris, "Laying claim to Canada's internal waters," *Toronto Sun*, February 23, 2007.

<sup>89</sup> Government of Canada, National Defence and the Canadian Armed Forces, *Canada First Defence Strategy* (May 2008). Full text at

[http://www.forces.gc.ca/assets/FORCES\\_Internet/docs/en/about/CFDS-SDCD-eng.pdf](http://www.forces.gc.ca/assets/FORCES_Internet/docs/en/about/CFDS-SDCD-eng.pdf).

<sup>90</sup> James Cudmore, "Sea King replacements: \$7.6B Cyclone maritime helicopters lack key safety requirement," *CBC News*, June 23, 2014.

<sup>91</sup> Steven Chase, "Myth versus reality in Stephen Harper's northern strategy," *Globe and Mail*, January 20, 2014.

<sup>92</sup> Public Works and Government Services Canada, *Backgrounder on the National Shipbuilding Procurement Strategy (NSPS) – Year 2: A Status Update* (November 2013).

<sup>93</sup> Interview with Capt. Cassidy, U.S. Navy, October 29, 2014.

<sup>94</sup> Murray Brewster, "Arctic warship order to be trimmed in shipbuilding plan," *CBC News*, October 20, 2014.

<sup>95</sup> Interview with John Higginbotham, senior fellow at the Centre for International Governance, July 10, 2014.

<sup>96</sup> U.S. State Department officials and Canadian Arctic scholars consistently agreed here—Harper knew that Arctic promises, whether he intended to keep them or not, would give him a bump in the 2006 federal election. The lack of follow through on these Arctic initiatives did not seem surprising to American diplomats knowledgeable on Canadian politics.

<sup>97</sup> Elizabeth Elliot-Meisel, "Still Unresolved after Fifty Years: The Northwest Passage in Canadian-American Relations, 1946-1998," *The American Review of Canadian Studies* (Autumn 1999): 420.

<sup>98</sup> Andrea Shalal and Ayesha Rascoe, "U.S. needs to invest in Arctic ships, technology to prepare for climate change: envoy," *Reuters*, October 21, 2014.

<sup>99</sup> Congressional Research Service, *Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress*, By Ronald O'Rourke (June 5, 2014).

<sup>100</sup> Committee on Transportation and Infrastructure U.S. House of Reps. July 18, 2014 Summary of Subject Matter.

<sup>101</sup> United States Coast Guard Office of Waterways and Ocean Policy, "Major Icebreakers of the World," (December 11, 2012).

<sup>102</sup> United States House of Representatives Committee on Transportation and Infrastructure, Hearing on "Implementing U.S. Policy in the Arctic," July 18, 2014. Full summary found at [http://transportation.house.gov/uploadedfiles/2014-07-23\\_-\\_coast\\_guard\\_ssm.pdf](http://transportation.house.gov/uploadedfiles/2014-07-23_-_coast_guard_ssm.pdf).

<sup>103</sup> Confirmed by Capt. Cassidy, interviews from summer 2014.

<sup>104</sup> Byers, *Who Owns the Arctic*, 76.

<sup>105</sup> Ibid.

<sup>106</sup> Information from various conversations with Bud Locklear, U.S. State Department, Summer 2014.

- 
- <sup>107</sup> Interview with David Vanderzwaag, Canadian legal scholar, August 12, 2014.
- <sup>108</sup> Ibid.
- <sup>109</sup> Ibid.
- <sup>110</sup> Information from International Maritime Organization press briefing. Full text at <http://www.imo.org/MediaCentre/PressBriefings/Pages/38-nmsc94polar.aspx#.VHTkzYdCmRl>.
- <sup>111</sup> International Maritime Organization, *IMO adopts mandatory Code for Ships Operating in Polar Waters*, Maritime Safety Committee (MSC), 94th session (November 21, 2014).
- <sup>112</sup> The White House, *Implementation Plan for the National Strategy for the Arctic Region* (January 2014).
- <sup>113</sup> Elliot-Meisel, "Still Unresolved after Fifty Years," (1999): 421.
- <sup>114</sup> The White House, *Implementation Plan for the National Strategy for the Arctic Region* (January 2014).
- <sup>115</sup> Quote from Thomas Wright, "Outlaw of the Sea: The Senate Republicans' UNCLOS Blunder," *Foreign Affairs*, August 7, 2012.
- <sup>116</sup> Wright, "Outlaw of the Sea," *Foreign Affairs*, 2012.
- <sup>117</sup> Ibid.
- <sup>118</sup> Ibid.
- <sup>119</sup> James Kraska, "The New Arctic Geography and U.S. Strategy," In *Arctic Security in an Age of Climate Change*, edited by James Kraska (New York: Cambridge University Press, 2011), 256.
- <sup>120</sup> Full committee hearing video found at: <http://transportation.house.gov/calendar/eventsingle.aspx?EventID=386881>.
- <sup>121</sup> International Chamber of Shipping, *Press Release: ICS Meets with Ministers to Discuss Arctic Shipping* (June 6, 2013).
- <sup>122</sup> Ibid.
- <sup>123</sup> Michael Byers, *International Law and the Arctic*, New York: Cambridge University Press, 2013, 62.
- <sup>124</sup> This section resulted from extensive conversations with Dr. Peter Harrison, Professor Emeritus at Queen's University in Kingston, Ontario, and former Senior Associate Deputy Minister of Indian and Northern Affairs Canada. Dr. Harrison, who also served as Chair of the International Polar Year 2012 Conference in Montreal, is one of the most knowledgeable Canadian scholars on Inuit and First Nations matters. The initial question of how Inuit land claims might affect any bilateral negotiations between Canada and the United States emanated from Dr. Harrison.
- <sup>125</sup> Government of Canada, Justice Laws Website, *Nunavut Land Claims Agreement Act (S.C. 1993, c. 29)*, Assented to 1993-06-10. Full text at <http://www.gov.nu.ca/sites/default/files/files/013%20-%20Nunavut-Land-Claims-Agreement-English.pdf>.
- <sup>126</sup> Ibid.
- <sup>127</sup> Northwest Territories, Aboriginal Affairs and Intergovernmental Relations, *Inuvialuit Comprehensive Lands Claim Agreement*. Full summary found at <http://www.landclaimscoalition.ca/coalition-members/irc/>.
- <sup>128</sup> Inuit Circumpolar Council. *Kitigaaryuit Declaration*. 12<sup>th</sup> General Assembly of the ICC, July 21-24, 2014, Inuvik, Canada. Full text at <http://www.inuitcircumpolar.com/uploads/3/0/5/4/30542564/img-724172331.pdf>.

---

<sup>129</sup> Ibid., 3.

<sup>130</sup> Ibid., 5.

## Bibliography

- Arctic Ocean Conference. *The Ilulissat Declaration*. Ilulissat, Greenland, May 28, 2008.
- Baffinland.com. "Baffinland Begins Mining Iron Ore." October 9, 2014.  
<http://www.baffinland.com/uncategorized/baffinland-begins-mining-iron-ore/?lang=en>.  
Accessed November 24, 2014.
- Bennett, Mia. "South Koreans take first Northern Sea Route cargo delivery from Russia." *Alaska Dispatch News*, October 29, 2013. <http://www.adn.com/article/20131029/south-koreans-take-first-northern-sea-route-cargo-delivery-russia>. Accessed November 24, 2014.
- Brewster, Murray. "Arctic warship order to be trimmed in shipbuilding plan." *CBC News*, October 20, 2014. <http://www.cbc.ca/news/canada/nova-scotia/arctic-warship-order-to-be-trimmed-in-shipbuilding-plan-1.2806600>. Accessed November 24, 2014.
- Brigham, Lawson W. "Environmental and Economic Security Challenges in a Changing U.S. Maritime Arctic." *Hoover Institution: Arctic Security Initiative*. April 9, 2014.  
<http://www.hoover.org/research/environmental-and-economic-security-challenges-changing-us-maritime-arctic>. Accessed July 24, 2014.
- Brigham, Lawson W. "The Challenges and Security Issues of the Arctic Marine Transport." In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 20-32. New York: Cambridge University Press, 2011.
- Byers, Michael. "Canada's Arctic nightmare just came true: The Northwest Passage is commercial." *Globe and Mail*, September 20, 2013. <http://www.theglobeandmail.com/globe-debate/canadas-arctic-nightmare-just-came-true-the-northwest-passage-is-commercial/article14432440/>.  
Accessed April 19, 2014.
- Byers, Michael. *International Law and the Arctic*. New York: Cambridge University Press, 2013.
- Byers, Michael. *Who Owns the Arctic: Understanding Sovereignty Disputes in the North*. Vancouver: Douglas & McIntyre Inc., 2009.
- "Canada and the United States of America: Agreement on Arctic Cooperation," Canada Treaty Series No. 31529, available at <https://treaties.un.org/doc/publication/unts/volume%201852/volume-1852-i-31529-english.pdf>. Accessed August 1, 2014.
- "Canada's defence spending: Darkness falls again?" *The Economist*. March 19, 2014.  
<http://www.economist.com/blogs/americasview/2014/03/canadas-defence-spending>. Accessed April 14, 2014.
- "Canada to Russia: 'We will defend our sovereignty in the Arctic.'" *Russia Today*, August 27, 2014.  
<http://rt.com/news/182992-canada-sovereignty-arctic-russia/>. Accessed November 24, 2014.

- Chase, Steven. "Myth versus reality in Stephen Harper's northern strategy." *Globe and Mail*, January 20, 2014. <http://www.theglobeandmail.com/news/national/the-north/myth-versus-reality-in-stephen-harpers-northern-strategy/article16397458/?page=all>. Accessed April 19, 2014.
- Congressional Research Service. *Coast Guard Polar Icebreaker Modernization: Background and Issues for Congress*. By Ronald O'Rourke. June 5, 2014.
- Cudmore, James. "Sea King replacements: \$7.6B Cyclone maritime helicopters lack key safety requirement." *CBC News*, June 23, 2014. <http://www.cbc.ca/news/politics/sea-king-replacements-7-6b-cyclone-maritime-helicopters-lack-key-safety-requirement-1.2684036>. Accessed July 25, 2014.
- Ebinger, Charles, John P. Banks, and Alisa Schackmann. "Offshore Oil and Gas Governance in the Arctic: A Leadership Role for the U.S." *Brookings Energy Security Initiative*, Policy Brief 14-01, March 2014. <http://www.brookings.edu/~media/Research/Files/Reports/2014/03/offshore%20oil%20gas%20governance%20arctic/Offshore%20Oil%20and%20Gas%20Governance%20web.pdf>. Accessed April 20, 2014.
- Elliot-Meisel, Elizabeth B. "Still Unresolved after Fifty Years: The Northwest Passage in Canadian-American Relations, 1946-1998." *The American Review of Canadian Studies*, Autumn 1999. 407-430. [https://www.creighton.edu/fileadmin/user/CCAS/departments/History/docs/Still\\_Unresolved\\_after\\_Fifty\\_Years.pdf](https://www.creighton.edu/fileadmin/user/CCAS/departments/History/docs/Still_Unresolved_after_Fifty_Years.pdf). Accessed July 29, 2014.
- Farquhar, Peter. "A Cargo Ship Just Completed a Historic Trip Through the Northwest Passage." *Business Insider*, October 2, 2014. <http://www.businessinsider.com/a-cargo-ship-just-completed-a-historic-trip-through-the-northwest-passage-2014-10>. Accessed November 24, 2014.
- Fednav.com. "Nunavik's Log Book." September 19 – October 17, 2014. <http://www.fednav.com/en/voyage-nunavik>. Accessed November 24, 2014.
- Francis, Diane. *Merger of the Century: Why Canada and America Should Become One Country*. Toronto: HarperCollins Publishers, 2013.
- Government of Canada. House of Commons. *Debates*, 33<sup>rd</sup> Parliament, 1<sup>st</sup> session, Vol. V (1985). September 10, 1985 (Ottawa 1985), 6463.
- Government of Canada, Justice Laws Website. *Nunavut Land Claims Agreement Act (S.C. 1993, c. 29)*. Assented to 1993-06-10. Full text at <http://www.gov.nu.ca/sites/default/files/files/013%20%20Nunavut-Land-Claims-Agreement-English.pdf>. Accessed November 24, 2014.
- Government of Canada, Law and Government Division. *Canada's Legal Claims Over Arctic Territory and Waters*. By Robert Dufresne. Parliamentary Research Service, December 2007.

- Government of Canada, National Defence and the Canadian Armed Forces. *Canada First Defence Strategy*. May 2008.
- Griffiths, Franklyn. "Arctic Security: The Indirect Approach." In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 3-19. New York: Cambridge University Press, 2011.
- Griffiths, Franklyn. "Pathetic Fallacy: That Canada's Arctic Sovereignty is on Thinning Ice." *Calgary Papers in Military and Strategic Studies*, Occasional Paper No. 4: *Canadian Arctic Sovereignty and Security: Historical Perspectives* (2011): 401-422. Accessed February 1, 2014.
- Hanlon, Tegan. "US, Canadian agencies monitoring diesel-carrying barge adrift in Arctic." *Alaska Dispatch News*, October 23, 2014. <http://www.adn.com/article/20141023/us-canadian-agencies-monitoring-diesel-carrying-barge-adrift-arctic>. Accessed November 24, 2014.
- Harris, Kathleen. "Laying claim to Canada's internal waters." *Toronto Sun*. February 23, 2007. <http://cnews.canoe.ca/CNEWS/Canada/2007/02/22/3655342-sun.html>. Accessed April 18, 2014.
- Ho, Joshua H. "The Arctic Meltdown and Its Implications for Ports and Shipping in Asia." In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 33-43. New York: Cambridge University Press, 2011.
- Huebert, Rob. "Canada and the Newly Emerging International Arctic Security Regime." In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 193-217. New York: Cambridge University Press, 2011.
- Huebert, Rob. "Climate Change and Canadian Sovereignty in the Northwest Passage." *Calgary Papers in Military and Strategic Studies*, Occasional Paper No. 4: *Canadian Arctic Sovereignty and Security: Historical Perspectives* (2011): 383-399. Accessed February 1, 2014.
- Huebert, Rob. "Is Canada ready for Russia's hardball approach to the North Pole?" *The Globe and Mail*, January 30, 2014. <http://www.theglobeandmail.com/globe-debate/is-canada-ready-for-russias-hardball-approach-to-the-north-pole/article16604726/>. Accessed November 24, 2014.
- International Chamber of Shipping. *Position Paper on Arctic Shipping*. December 2012.
- International Chamber of Shipping. *Press Release: ICS Meets with Ministers to Discuss Arctic Shipping*. June 6, 2013.
- International Court of Justice. Corfu Channel Case, Judgment of April 9, 1949: ICJ Reports 1949, p. 4. <http://www.icj-cij.org/docket/files/1/1645.pdf>. Accessed November 24, 2014.
- International Court of Justice. Norwegian Fisheries Case, Judgment of December 18, 1951: ICJ Reports 1951, p. 116. <http://www.icj-cij.org/docket/files/5/1809.pdf>. Accessed November 24, 2014.
- International Maritime Organization. *IMO adopts mandatory Code for Ships Operating in Polar Waters*. Maritime Safety Committee (MSC), 94th session, November 21, 2014.

<http://www.imo.org/MediaCentre/PressBriefings/Pages/38-nmsc94polar.aspx#.VHOw2odCmRl>. Accessed November 24, 2014.

Inuit Circumpolar Council. *Kitigaaryuit Declaration*. 12<sup>th</sup> General Assembly of the ICC, July 21-24, 2014, Inuvik, Canada. Full text at <http://www.inuitcircumpolar.com/uploads/3/0/5/4/30542564/img-724172331.pdf>. Accessed November 24, 2014.

Johnson, Terrell. "Climate Change Tourism Comes to the Arctic: \$20,000 Luxury Cruise to Sail the Once-Unnavigable Northwest Passage." *The Weather Channel*, July 29, 2014. <http://www.weather.com/news/science/environment/melting-arctic-20000-luxury-cruises-climate-change-tourism-20140728>. Accessed August 5, 2014.

Killaby, Guy. "'Great Game in a Cold Climate': Canada's Arctic Sovereignty in Question." *Canadian Military Journal* (Winter 2005-2006): 31-40. <http://www.journal.dnd.ca/vo6/no4/doc/north-nord-01-eng.pdf>. Accessed April 14, 2014.

Kraska, James. "The New Arctic Geography and U.S. Strategy." In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 244-266. New York: Cambridge University Press, 2011.

Lackenbauer, P. Whitney. "Conclusions: 'Use it or Lose It,' History, and the Fourth Surge." *Calgary Papers in Military and Strategic Studies*, Occasional Paper No. 4: *Canadian Arctic Sovereignty and Security: Historical Perspectives* (2011): 423-436. Accessed February 1, 2014.

Lackenbauer, P. Whitney. "Polar Race or Polar Saga? Canada and the Circumpolar World." In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 218-243. New York: Cambridge University Press, 2011.

Lalonde, Suzanne and Frederic Lasserre. "The Position of the United States on the Northwest Passage: Is the Fear of Creating a Precedent Warranted?" *Ocean Development and International Law* (February 5, 2013): 28-72. Accessed April 14, 2014.

McGarritty, John and Henning Gloystein. "Big freighter traverses Northwest Passage for 1<sup>st</sup> time." *Reuters*, September 27, 2013. <http://www.reuters.com/article/2013/09/27/us-shipping-coal-arctic-idUSBRE98Q0K720130927>. Accessed April 16, 2014.

Medred, Craig. "Expert predicts ice-free Arctic by 2020 as UN releases climate report." *Alaska Dispatch News*, November 2, 2014. <http://www.adn.com/article/20141102/expert-predicts-ice-free-arctic-2020-un-releases-climate-report>. Accessed November 24, 2014.

Miles, Donna. "U.S., Canada Expand Arctic Cooperation, Military Training." *U.S. Department of Defense*, American Foreign Press Service, December 11, 2012. <http://www.defense.gov/news/newsarticle.aspx?id=118768>. Accessed April 18, 2014.

“Modeling Oil Spills in the Beaufort Sea; Exploring the Risk: What would happen if oil spills in the Beaufort Sea?” *World Wildlife Fund Canada*, Summary Report. 2014.  
[http://awsassets.wwf.ca/downloads/wwf\\_beaufort\\_sea\\_oil\\_spill\\_modelling\\_summary\\_report.pdf](http://awsassets.wwf.ca/downloads/wwf_beaufort_sea_oil_spill_modelling_summary_report.pdf). Accessed July 28, 2014.

National Defence and the Canadian Armed Forces. “Operation NANOOK.”  
<http://www.forces.gc.ca/en/operations-canada-north-america-recurring/op-nanook.page>. Accessed November 24, 2014.

National Snow and Ice Data Center. *Arctic sea ice continues low; Antarctic ice hits a new high*. October 7, 2014. <http://nsidc.org/news/newsroom/arctic-sea-ice-continues-low-while-antarctic-reaches-new-record-high>. Accessed November 24, 2014.

National Snow and Ice Data Center. *Arctic Sea Ice News and Analysis: Arctic sea ice at fifth lowest annual maximum*. April 2, 2014. <http://nsidc.org/arcticseaicenews/2014/04/arctic-sea-ice-at-fifth-lowest-annual-maximum/>. Accessed April 15, 2014.

National Snow and Ice Data Center. *Arctic Sea Ice News and Analysis: Arctic sea ice extent settles at record seasonal minimum*. September 19, 2012. <http://nsidc.org/arcticseaicenews/2012/09/arctic-sea-ice-extent-settles-at-record-seasonal-minimum/>. Accessed November 24, 2014.

Northern Sea Route Information Office. *Transit Statistics 2011-2013*. Operated by the Centre for High North Logistics (CHNL). [http://www.arctic-lio.com/nsr\\_transits](http://www.arctic-lio.com/nsr_transits). Accessed November 24, 2014.

Northwest Territories, Aboriginal Affairs and Intergovernmental Relations. *Inuvialuit Comprehensive Lands Claim Agreement*.  
[http://www.daair.gov.nt.ca/\\_live/pages/wpPages/InuvialuitLandClaim.aspx](http://www.daair.gov.nt.ca/_live/pages/wpPages/InuvialuitLandClaim.aspx). Accessed November 24, 2014.

“NSSN Virginia Attack Class Submarine, United States of America.” *Naval-technology.com*.  
<http://www.naval-technology.com/projects/nssn/>. Accessed April 20, 2014.

Nunavut Planning Commission. *Oil Spill Detection and Modeling in the Hudson and Davis Straits*. Prepared by LOOKNorth Centre of Excellence for Commercialization and Research, Final Report R-13-087-1096, May 29, 2014.

“Oil companies seek to drill in deep Beaufort Sea.” *CBCNews*, September 27, 2013.  
<http://www.cbc.ca/news/canada/north/oil-companies-seek-to-drill-in-deep-beaufort-sea-1.1871343>. Accessed April 19, 2014.

Pharand, Donat. “Historic Waters in International Law with Special Reference to the Arctic.” *The University of Toronto Law Journal* Vol. 21, No. 1 (1971): 1-14. Accessed February 14, 2014.

Pharand, Donat. “The Arctic Waters and the Northwest Passage: A Final Revisit.” *Ocean Development and International Law*, 38:1-2 (2007): 3-69. Accessed February 14, 2014.



- Pizzolato, Larissa, Stephen Howell, et al. "Changing Sea Ice Conditions and Marine Transportation Activity in Canadian Arctic Waters Between 1990 and 2012." *Climatic Change*, Vol. 123 (2014), 161-173.
- Public Works and Government Services Canada. *Backgrounder on the National Shipbuilding Procurement Strategy (NSPS) – Year 2: A Status Update*. November 2013. Found at <http://www.tpsgc-pwgsc.gc.ca/app-acq/sam-mps/ddi-bkgr-10-eng.html>. Accessed July 25, 2014.
- Pugliese, David. "Norad to increase focus on Arctic surveillance." *Ottawa Citizen*. March 3, 2014. <http://www.ottawacitizen.com/news/Norad+increase+focus+Arctic+surveillance/9574388/story.html>. Accessed April 18, 2014.
- Raspotnik, Andreas. "Positive Unilateralism – An Effective Strategy to Protect the Canadian Arctic Environment or a Subtle Approach to Establish Sovereignty?" *The Arctic Institute – Center for Circumpolar Studies*, December 23, 2011. <http://www.thearcticinstitute.org/2011/12/92743-positive-unilateralism-effective.html>. Accessed April 19, 2014.
- Rosen, Yereth. "Shell halts 2013 drilling plans in Alaska's Arctic seas." *NBC News*, February 28, 2013. [http://usnews.nbcnews.com/\\_news/2013/02/28/17127904-shell-halts-2013-drilling-plans-in-alaskas-arctic-seas?lite](http://usnews.nbcnews.com/_news/2013/02/28/17127904-shell-halts-2013-drilling-plans-in-alaskas-arctic-seas?lite). Accessed July 22, 2014.
- Rothwell, Donald R. "The Canadian-U.S. Northwest Passage Dispute: A Reassessment." *Cornell International Law Journal* (1993): 331-372. Accessed February 1, 2014.
- Shalal, Andrea and Ayesha Rascoe. "U.S. needs to invest in Arctic ships, technology to prepare for climate change: envoy." *Reuters*, October 21, 2014. <http://www.reuters.com/article/2014/10/21/us-usa-arctic-navy-climatechange-idUSKCN0IA2S520141021>. Accessed November 24, 2014.
- Stewart, Brian. "Putin gets payback for Canada's anti-Russia stance." *CBC News*, June 27, 2014. <http://www.cbc.ca/news/politics/putin-gets-payback-for-canada-s-anti-russia-stance-brian-stewart-1.2688655>. Accessed November 24, 2014.
- "Stranded Arctic cruise passengers head home." *CBC News*, August 30, 2010. <http://www.cbc.ca/news/canada/north/stranded-arctic-cruise-passengers-head-home-1.930631>. Accessed November 24, 2014.
- Stueck, Wendy. "Groundbreaking Northwest Passage voyage almost foundered over insurance." *The Globe and Mail*, October 2, 2013. <http://www.theglobeandmail.com/news/british-columbia/groundbreaking-northern-voyage-almost-foundered-over-insurance/article14649393/>. Accessed August 5, 2014.
- The White House. *Implementation Plan for the National Strategy for the Arctic Region*. January 2014.

The White House. *National Security Presidential Directive 66, Homeland Security Presidential Directive 25*. January 2009. Retrieved from the *Federation of American Scientists Intelligence Resource Program*. <https://www.fas.org/irp/offdocs/nspd/nspd-66.htm>. Accessed April 20, 2014.

The White House. *National Strategy for the Arctic Region*. May 2013.

Titley, David W. and Courtney C. St. John. "Arctic Security Considerations and the U.S. Navy's 'Arctic Roadmap.'" In *Arctic Security in an Age of Climate Change*, edited by James Kraska, 267-280. New York: Cambridge University Press, 2011.

United Nations Division for Ocean Affairs and the Law of the Sea. *United Nation's Convention on the Law of the Sea*. December 10, 1982.

United States Coast Guard Office of Waterways and Ocean Policy. "Major Icebreakers of the World." December 11, 2012. <http://www.uscg.mil/hq/cg5/cg552/docs/MAJOR%20ICEBREAKERS%20Chart.pdf>. Accessed November 24, 2014.

United States Department of Defense. *Arctic Strategy*. November 2013.

United States Department of Defense. *Report to Congress on Arctic Operations and the Northwest Passage*. May 2011.

United States Department of State. Cable # VZCZCXYZ0001. January 21, 2010. Available at <http://aptn.ca/news/2011/05/11/while-harper-talked-tough-with-nato-on-arctic-u-s-believed-pm-all-bark-no-bite/>. Accessed April 21, 2014.

United States House of Representatives Committee on Transportation and Infrastructure. Hearing on "Implementing U.S. Policy in the Arctic." July 18, 2014. Full summary found at [http://transportation.house.gov/uploadedfiles/2014-07-23\\_-\\_coast\\_guard\\_ssm.pdf](http://transportation.house.gov/uploadedfiles/2014-07-23_-_coast_guard_ssm.pdf). Accessed November 24, 2014.

United States Navy. *Arctic Roadmap 2014-2030*. February 2014.

United States Navy. *Navy Strategic Objectives for the Arctic: Memorandum for Distribution*. By Admiral G. Roughead. Washington, D.C.: Chief of Naval Operations, 2010.

*United States Ocean Policy*. Statement by the President – Administration of Ronald Reagan, March 10, 1983. [http://www.gc.noaa.gov/documents/031083-reagan\\_ocean\\_policy.pdf](http://www.gc.noaa.gov/documents/031083-reagan_ocean_policy.pdf). Accessed April 17, 2014 via the National Oceanic and Atmospheric Association.

VanderZwaag, David. "Law of the Sea and Governance of Shipping in the Arctic and Antarctic." In *Polar Law Textbook*, edited by Natalia Loukacheva, 45-64. Copenhagen: Nordic Council of Ministers, 2010.

Wallace, Ron. "Emerging Canadian Priorities and Capabilities for Arctic Search and Rescue." *Canadian Defence and Foreign Affairs Institute*, January 2012.

Weber, Bob. "More Northwest Passage travel planed by Danish shipper." *CBC News*. January 3, 2014. <http://www.cbc.ca/news/canada/north/more-northwest-passage-travel-planned-by-danish-shipper-1.2482731>. Accessed July 28, 2014.

Wright, Thomas. "Outlaw of the Sea: The Senate Republicans' UNCLOS Blunder." *Foreign Affairs*, August 7, 2012. <http://www.foreignaffairs.com/articles/137815/thomas-wright/outlaw-of-the-sea>. Accessed April 21, 2014.